Digitized by the Internet Archive
in 2018 with funding from
Cambridge Public Libray

https://archive.org/details/mayorsaddressato1901camb

CAMBRIDGE PUBLIC LIBRARY

City Hall.

352
C14

City of Cambridge

Massachusetts

THE MAYOR'S ADDRESS

AT THE

ORGANIZATION OF THE CITY GOVERNMENT

JANUARY 6, 1902

AND

THE ANNUAL REPORTS

MADE TO THE CITY COUNCIL

FOR THE YEAR 1901

PUBLISHED BY ORDER OF THE CITY COUNCIL
UNDER THE DIRECTION OF THE
CITY CLERK.

J·A·CUMMINGS
PRINTING CO.
172 OLIVER ST.
BOSTON.

ADDRESS

OF

HON. JOHN H. H. McNAMEE

TO THE

CITY COUNCIL

January 6, 1902

Gentlemen of the City Council:—

We have been duly elected by the citizens of Cambridge to administer her affairs for the coming year, and have met today for the purpose of taking that solemn oath which binds us to our best endeavors to give to all her people a government which shall be the least burdensome commensurate with the needs of a growing community, and it will be our bounden duty carefully to weigh the questions coming before us that we may determine what are the absolute needs for which her money must be expended during the coming year.

It is simply a business proposition which our citizens have intrusted to our care, and it is as business men we should attempt to solve the various questions which shall come before us. To conduct the departments of our City according to the very highest standards and at the least possible expense to her tax-payers, is the business motto which must be followed if we are to merit the approbation of our fellow citizens. It is well then to know the exact

conditions on which we start and to this end the following concise statement of our City's finances will be of benefit.

The total valuation of our taxable property in 1901 was	$96,216,875 00
Our net bonded debt December 1, 1901, was	4,000,547 64
Our net bonded water debt December 1, 1901, was	2,374,368 46
Our net total debt December 1, 1901, was	$6,374,916 10

Our municipal debt has been increasing very rapidly during the last five years.

In the year 1897 it increased	$177,194 33
In the year 1898 it increased	323,512 20
In the year 1899 it increased	187,627 81
In the year 1900 it increased	173,267 90
In the year 1901 it increased	407,613 64
Making a total increase for five years of	$1,269,215 88

With two new schoolhouses to build, a new bridge partially to complete, and our Parks (with a possible triple assessment from the Metropolitan Park Commission, a legacy which has been handed down to us by our predecessors), and new sewage system to look after, the increase the coming year bids fair to be forced up to even higher figures. We should bear this in mind in order that we may practice the most rigid economy.

Of the whole amount raised by taxation in 1901	$1,682,930 61
About 1-4th went to the schools	432,455 86
About 1-5th for Interest and Sinking Fund requirements	360,705 83
About 1-6th for State and County Assessments	266,876 39
About 1-10th for Streets	153,683 84
About 1-14th for Police	122,458 58
About 1-18th for Fire	93,150 00
About 1-18th for Poor	90,065 00
About 1-20th for Street Lighting	83,200 00
About 1-20th for Miscellaneous Expenses—Health, Park, Library, City Buildings, Sewer, Treasurer, Assessors, etc.	80,345 11

With these figures in our minds, and giving us a thorough knowledge of what we are forced to spend for our interest and sinking fund requirements, and for our State and County assessments, we may intelligently proceed to examine the reports of our different departments and decide what consideration should be given to the needs of each.

STREET DEPARTMENT.

The problems arising from the proper conduct of affairs in this department are so many and complex that I shall make no recommendations until becoming better informed as to their nature.

POLICE.

While in the main our police force is in fairly satisfactory condition, I believe there are some points in which it could be improved. Many of the men through old age, or some physical infirmity, have become unable to perform the arduous duties required of them, and are a detriment to the efficiency of the force. I therefore recommend that all men who come under this head be retired.

FIRE DEPARTMENT.

Your attention is called to the increasing necessity of adequate fire protection for that growing section of Wards One and Five adjacent to Garden Street and Observatory Hill. If possible, provision should be made to place an engine in that locality in the near future.

CITY ENGINEER.

Among other important works this department has begun the preparation of plans showing the location, depth and size of all conduits, sewers and pipes in the streets of our City. Special attention is called to the condition of the bridges over the Fitchburg Railroad at Walden Street and Huron Avenue.

A detailed account of operations will be found in the Annual Report and no recommendations will be made at this time.

ELECTRICAL DEPARTMENT.

The City Electrician asks your consideration of the installation of an electric light plant at the Rindge Manual Training School to furnish not only light for the group of public buildings in that vicinity, but a means of instruction at that school. He also presents for your consideration, the subject of Municipal Conduits and a summary of its history, principles and advantages. I recommend your careful examination of this system as I believe with him that the present is the proper time to act upon the question.

PUBLIC LIBRARY.

Our Library with its able administration is a source of pride to all our citizens. Under the guidance of a Librarian thoroughly equipped in all branches of modern library work, it has become one of the most useful institutions in our City. During the year contracts have been let for the building of a new stack which will hold about 60,000 volumes. This will about double our present shelf room and will without doubt be sufficient for all our needs for at least twenty years.

WATER BOARD.

The Board reports the total cost of the works to November 30th, 1901, was $5,702,428.23. They suggest that owing "to the danger and discomfort of persons who ride and drive thereon," an ordinance be passed "prohibiting the use of the driveway around Fresh Pond by Motor-Vehicles." They also ask that an appropriation of $10,000.00 or more be made for the extension of the meter system. I shall make no recommendations here until I have given these subjects more serious thought than I have yet been able to devote to them.

COMMISSIONER FOR THE BOSTON AND CAMBRIDGE BRIDGES.

I would particularly recommend your careful consideration of the condition of the draw of Craigie Bridge, which is in a very serious state, and which seems to me to be a matter of more than ordinary importance.

BOARD OF HEALTH.

In view of the epidemic of Small Pox with which our City has been afflicted, I would suggest liberality on your part to this Board to further any of their plans which may seem to you and to them for the preservation of the health of our citizens. For I believe Health should be placed before Wealth at all times and that we should not measure the lives of our people by the standard of dollars. I recommend the closing of the Temporary Hospital now located on Reservoir Street and Huron Avenue at as early a date as possible.

I recommend also that the Board of Health examine the many ponds and clay lands in the northern and western sections of our city and advise as to the necessity or otherwise of their purification by filling.

THE SCHOOL BOARD.

The number of pupils in our public schools on the first of December, 1901, was	14,494
The number of teachers	414

The increase over last year in number of pupils is 62; in the number of teachers, 5; in the cost of the schools, $11,654.22; in the cost of instruction, $9,637.46.

I would suggest to the School Board the propriety of a close connection with the Finance Committee of the City Council, in order that an especially careful outlay of our citizens' money may be ensured.

PARK DEPARTMENT.

For the proper development of the Esplanade lands, a connection between Harvard and Brookline Bridges seems absolutely necessary, and, as this has been recommended by the Park Commissioners, I present it for your consideration, and also ask that the work of completing the river road from Boylston to DeWolf

Streets be continued next spring. It must be apparent to all that if we are to derive the benefit which must accrue from the raise in the value of land contiguous to our Parks, we should at as early a time as possible, consistent with economy, provide connecting links between the developed portions of our Park system.

I would recommend the policy of establishing as soon as possible out door gymnasiums, that our young people may derive all the benefit possible from these splendid breathing places.

This department is making a strong effort to bring to the attention of our citizens, the great necessity of destroying at once the nests of that intolerable pest, the Brown Tail Moth. Unless the property owners work with the Commissioners and take hold of this question at once, all the efforts of our Park Commissioners will be in vain. Practically all the trees in our City are in danger of being ruined by this insect, which destroys the beauty of the foliage and produces severe physical discomfort to humanity, not alone by actual contact with the insect itself, but by the minute hairs which it sheds. The cutting off of the nests before the young caterpillars emerge therefrom, and the burning of them, will be a long step toward extermination.

SEALER OF WEIGHTS AND MEASURES.

Owing to the fact that the present Sealer was unable to find any record of work performed by his predecessor from December 1, 1900, to April 23, 1901, and as no fees had been paid into the City Treasurer up to that date, this department was in a very unsatisfactory condition. The equipment of the office is not complete, a new balance and try scale being much needed, in order that accuracy may be obtained.

OVERSEERS OF THE POOR.

Owing to the inability of the Chairman of this Board to meet and confer with me during the limited time at my disposal, I have been unable to obtain much desired information from this department and so defer any praise or criticism which I might make until

later. I would suggest to your honorable body the propriety of taking some steps to lessen the possibility of an incoming Mayor being hampered hereafter in his efforts to obtain information necessary to his intelligent comprehension of affairs in the different departments which he will be called upon to supervise.

CAMBRIDGE CEMETERY.

I concur in the recommendation of the Commissioners, that the lands now belonging to the Mt. Auburn Cemetery Corporation and adjoining our cemetery at its northerly line be secured for the uses of the Cambridge Cemetery. It seems to me eminently desirable that this property should be under the control of this City, and the present would appear to be a favorable opportunity to obtain this control, by conveyance or otherwise.

The reports of all other departments show careful and conscientious efforts upon the part of their members to fulfil the obligations imposed upon them. These reports will be found in the forthcoming annual, and a reading of them will be of material assistance to you in your deliberations of the coming year.

CARE OF EXPENDITURES.

I wish to recommend to all commissions a more careful scrutiny of expenditures made by their agents and to see that these expenditures are authorized by their boards before they are contracted. Thousands of dollars are wasted which, with a little more care, might be saved to our citizens without material injury to the work of many departments.

PERMANENT BATHS.

I recommend to you the propriety of examining carefully into the subject of permanent baths, with the object of erecting one in this City, if your honorable body shall determine it to be necessary at this time.

OFFICE HOURS AT CITY HALL.

I recommend that you should carefully weigh the question of uniform working hours in the several offices at City Hall, in order not only that people may know just at what hours these offices are open for business, but that all employees of the City may have the same hours for labor.

All large mercantile houses may be found open for business from the hours of 8 A. M. until 4 P. M. at least, and custom has made men look at those hours as the proper ones in which to transact business. Therefore, our people demand and have a right to expect their servants to give to the City the minimum at least of hours usually allotted to labor in the large establishments of trade. And here let me say, that all commissions and departments should be held to a strict enforcement of the Civil Service and eight hour laws, to the end that all our servants shall have an equal share in these beneficent regulations.

LAND VALUES.

The true idea of the unit of land valuation is simply the earning power of the land and it is reasonable to suppose that in the greatest centres of human activity the land has the greatest earning power, and therefore all land values should be gauged according to the location of the land to the sphere of activity, each successive piece as it recedes from the centre becoming of less earning power and therefore of less value for investment. Following out this argument to a conclusion would give us a just and honest scheme of valuation in the business sections of our City for purposes of taxation. I have been unable to find that our Assessors know anything of this or any other plan which would assist the layman in determining the why or wherefore of any values placed by them.

I believe the present system of three principal Assessors is unwieldy and not conducive to a uniform method of valuations, each member being a power unto himself in the district over which he has control, and guided by no rule except his own judgment.

The same business principle which demands *one* head to *all* city affairs, should demand there be only *one* head to *each* department and that he should be under the control of the executive who has been chosen by the people to manage *all* their affairs. It seems absurd from a business point of view that the office which determines the sources of revenue should be so far removed from the authority of the officer who controls its outlay, as virtually to be beyond his control.

I therefore recommend that we ask for legislation in order that the provisions of the City Charter which relate to the election of Assessors by the qualified voters be amended so that three Assessors shall be appointed by the Mayor without confirmation thereof by the Board of Aldermen. These three Assessors shall hold office until the expiration of one, two and three years, respectively, from the first Monday in February, 1903, and annually in January thereafter the Mayor shall appoint one Assessor who shall hold office for the term of three years from the first Monday in February following. One of the three Assessors so appointed by the Mayor shall annually be designated Chairman by the Mayor, and shall be known as Principal Assessor. Said Chairman shall decide all disputed questions arising in the Board.

I find there has been no definite plan followed by our Assessors in their work of placing the value upon land in the different sections of our City, and they either cannot or will not venture to suggest a uniform scheme which will apply to the whole City, and the scope of which the landholders will readily understand. Therefore I recommend that a commission be appointed at once to make an exhaustive examination of all values in this City, and formulate a plan of assessment which may be followed hereafter.

PUBLISHING LAND VALUES.

I recommend such legislation as will compel the Board of Assessors to publish a complete list of land valuations as placed by them on the first of May in each year.

UNPAID TAXES.

At the close of our fiscal year, December 1, 1901, there remained the following amounts of taxes uncollected.

For taxes levied in the year —

1896	$18,982 36
1897	27,165 12
1898	27,914 60
1899	24,530 93
1900	31,919 53
1901	339,831 95
	$470,344 49

And there is a very slight probability that any which remains upon our books, prior to 1900, will ever be collected. This is what remains after all abatements have been made and after the Treasurer has used all means at his command to collect. I believe it is our duty to see if some plan cannot be adopted which will be more effective, and by which this money which is legally owed us may be collected.

COLLECTOR OF TAXES.

I recommend that legislation be asked for creating the office of Tax Collector, whose sole duty it shall be to collect all taxes levied by the Assessors, and who shall be appointed by the Mayor.

I believe the office of Collector of Taxes should be separated from that of Treasurer, and that in so doing a great saving could be effected, as the person whose salary depended entirely on the manner in which the collections were made would be more likely to exercise care than one whose duties were divided. A City Collector, with no other business than the collection of taxes, with power to put on Deputies, could cover the City in a very short time, and would succeed in searching out a larger number of delinquents than has been possible heretofore, and the expense, if

any greater, would be more than offset by the extra amount collected. At present, the City Treasurer has to rely on Constables who are paid by commissions on the amount collected. Before these few Constables get about, many who wish to evade payment have moved and cannot be found. It would be a distinct advantage to have the Assessors give warrant for the poll tax to the Collector much earlier than they do, even if they have to divide the warrants, and give that for the collection of polls and personals before that for real estate.

These two departments of Assessors and Collectors, which are so closely identified with each other, should work in complete harmony with, and be under the control of, your executive, who should, as in any business corporation, have the power of appointment and removal of the members of each.

Gentlemen of the City Council: —

Let us approach our duties, firmly bent upon upholding the honor of our dear old mother Cambridge, at whose shrine so many noble sons have knelt, and whose hands have been so often raised in benediction of deeds well performed; that it may be said of us that we too have been a pride and honor to her we love so well.

ANNUAL REPORTS

ANNUAL REPORT OF THE CITY AUDITOR

City Auditor's Office,
Cambridge, December 2, 1901.

To the Honorable, the City Council :—

The undersigned herewith presents the annual statement of the receipts and expenditures of the City of Cambridge for the fiscal year beginning on the first day of December, 1900, and ending on the thirtieth day of November, 1901, together with a schedule of the City property.

Respectfully submitted,

HARRY T. UPHAM,
City Auditor.

REPORT OF THE CITY AUDITOR

Balance in the Treasury, November 30, 1900			$255,699 25
The receipts from all sources from December 1, 1900, to November 30, 1901, were as follows: —			
From City Departments		$147,821 71	
Water Works		336,968 51	
Taxes: —			
City	$1,641,310 90		
Corporations	82,813 60		
National Banks	16,541 23		
Street Railway	83,997 99		
		1,824,663 72	
Sale of Bonds: —			
For building Public Library addition	$27,000 00		
Cambridge Bridge	200,000 00		
Construction of Streets	54 000 00		
Extension of Water Works	30,000 00		
Improved Sewerage	110,000 00		
Parks	100,000 00		
Schoolhouse (New)	76,000 00		
Schoolhouses (Remodelling)	36,000 00		
Premium on Loans	31,431 00		
		664,431 00	
Park Betterments		771 68	
Perpetual Care of Lots in Cambridge Cemetery		5,279 63	
Commissioners of Sinking Funds for payment of matured bonds		175,000 00	
Temporary Loans in anticipation of Taxes		550,000 00	
Total receipts			$3,704,936 25
			$3,960,635 50
The payments have been as follows: —			
City Departments		$2,347,265 32	
Water Works		367,545 83	
Trustees of Cemetery Fund		5,279 63	
Loans: —			
Bridge	$15,000 00		
Schoolhouses	160,000 00		
Temporary	550,000 00		
		725,000 00	
Taxes: —			
County	$100,429 89		
Metropolitan Sewer	72,344 93		
National Bank	6,935 25		
State	55,790 00		
Tax Liens	3,500 00		
		239,000 07	
Total payments			3,684,090 85
Balance unexpended			$276,544 65

CITY FUNDED DEBT.

There have been additions to the City Funded Debt during the year as follows:—

Cambridge Bridge Loan, registered bonds payable in forty years, at an annual interest of three and three and one-half per cent.	
For the purpose of the construction of the "Cambridge Bridge" and its approaches, and for other purposes, as authorized under the provisions of Chapter 467 of the Legislative Acts of 1898	$200,000 00
City Loan, registered bonds payable in ten years, at an annual interest of three and one half per cent	
For the purpose of defraying the expense of making alterations and repairs in the Gannett, Lassell, Manual Training Riverside and Tarbell schoolhouses and land for Temporary Hospital .	36,000 00
Park Loans, registered bonds payable in forty years, at an annual interest of three and one-half per cent.	
For the purpose of paying for property purchased, taken or held for a public park or esplanade as authorized by Chapter 341 or the Acts of 1892, Chapter 337 Acts of 1893, and Acts in amendment thereof and in addition thereto, and also for defraying the expense of constructing such park or esplanade and for any purpose incident to the protection, enlargement or advancement, of a public park or esplanade in said City of Cambridge, as authorized by Chapter 221 of the Acts of the year 1899 . .	100,000,00
Public Library Loan, registered bonds payable in twenty years, at an annual interest of three and one-half per cent.	
For the purpose of the completion of the stackwing of the Cambridge Public Library Building under the provisions of Chapter 212 of the Legislative Acts of the year 1894 . .	27,000 00
School House Loan, registered bonds payable in twenty years, at an annual interest of three and one-half per cent.	
For the purpose of constructing a fourteen room schoolhouse in Ward One and paying all expenses incidental thereto, under the provisions of Chapter 212 of the Acts of 1894 . . .	76,000 00
Sewer Loan, registered bonds payable in thirty years, at an annual interest of three and one-half per cent.	
For the purpose of constructing Sewers, as authorized by Chapters 189 and 473 of the Acts of 1899	110,000 00
Street Loan, registered bonds payable in twenty years, at an annual interest of three and one-half per cent	
For the purpose of defraying the cost of constructing Belmont, Clark and Granite streets	54,000 00
	$603,000 00

There has been a decrease in the City Debt by the payment of matured bonds as follows:—

Bridge Loan, coupon bonds issued July 1, 1901 at an annual interest of four per cent	$15,000 00	
Schoolhouse Loans, coupon bonds issued Jan. 1, 1891, and July 1, 1891, at an annual interest of four per cent	160,000 00	
		$175,000 00
Total increase		$428,000 00

	1900	1901	Increase.
Funded City Debt	$4,614,400 00	$5,042,400 00	$428,000 00
Sinking Fund	1,021,466 00	1,041,852 36	20,386 36
Net Funded City Debt	$3,592,934 00	$4,000,547 64	$407,613 64

The following is a statement of the total funded debt of the City, with the rates of interest thereon:—

BRIDGE LOAN.

Date of Issue.	Rate of Interest.	When Due.	Amount.	Total.
Oct. 1, 1887	4 per cent.—30 yrs	Oct. 1, 1917	$10,000 00	
July 1, 1888	4 " —30 "	July 1, 1918	100,000 00	
Sept. 1, 1888	4 " —30 "	Sept 1, 1918	100,000 00	
Mar. 1, 1889	4 " —30 "	Mar. 1, 1919	115,000 00	
Nov. 1, 1890	4 " —30 "	Nov. 1, 1920	5,000 00	
July 1, 1891	4 " —30 "	July 1, 1921	60,000 00	
Aug. 1, 1893	4 " —30 "	Aug. 1, 1923	10,000 00	
July 1, 1899	3½ " —40 "	July 1, 1939	50,000 00	
July 2, 1900	3½ " —40 "	July 2, 1940	100,000 00	
Feb. 1, 1901	3 " —40 "	Feb. 1, 1941	100,000 00	
Nov. 1, 1901	3½ " —40 "	Nov. 1, 1941	100,000 00	$750,000 00

BUILDING LOAN.

May 2, 1892	4 per cent.—10 yrs	May 2, 1902	$20,000 00	
Nov. 1, 1893	4 " —10 "	Nov. 1, 1903	40,000 00	
Aug. 1, 1894	4 " —20 "	Aug. 1, 1914	118,000 00	
Oct. 1, 1895	4 " —20 "	Oct. 1, 1915	60,000 00	
Oct. 1, 1896	4 " —20 "	Oct. 1, 1916	103,000 00	$341,000 00

CAMBRIDGE CEMETERY LOAN.

Aug. 1, 1885	4 per cent.—20 yrs	Aug. 1, 1905	$65,000 00	
Nov. 1, 1900	3½ " —10 "	Nov. 1, 1910	7,000 00	$72,000 00

CITY LOAN.

Aug. 1, 1894	4 per cent.—10 yrs	Aug. 1, 1904	$52,000 00	
Aug. 1, 1898	3½ " —10 "	Aug. 1, 1908	4,900 00	
July 1, 1899	3½ " —10 "	July 1, 1909	45,000 00	
Nov. 1, 1899	3½ " —10 "	Nov. 1, 1909	32,000 00	
Nov. 1, 1900	3½ " —10 "	Nov. 1, 1910	36,000 00	
Nov. 1, 1901	3½ " —10 "	Nov. 1, 1911	36,000 00	$205,900 00

CLAY LAND LOAN.

July 1, 1896	4 per cent.—15 yrs	July 1, 1911	$50,000 00	
Nov. 1, 1897	3½ " —15 "	Nov. 1, 1912	20 000 00	
Aug. 1 1898	3½ " —15 "	Aug. 1, 1913	10,000 00	
July 1, 1899	3½ " —15 "	July 1, 1914	17,000 00	$97,000 00

Amount carried forward $1,465,900 00

Amount brought forward $1,465,900 00

PARK LOAN.

Feb. 1, 1894.....	4 per cent.—30 yrs....	Feb. 1, 1924.....	$360,000 00	
Aug. 1, 1895.....	4 " —40 "	Aug. 1, 1935.....	100,000 00	
Feb. 1, 1896.....	4 " —40 "	Feb. 1, 1936.....	100,000 00	
Aug. 1, 1896.....	4 " —30 "	Aug. 1, 1926.....	100,000 00	
Oct. 1, 1896.....	4 " —30 " ...	Oct. 1, 1926... ...	40,000 00	
Sept. 1, 1897.....	3½ " —40 "	Sept. 1, 1937.....	100,000 00	
Nov. 1, 1897.....	3½ " —40 "	Nov. 1, 1937.....	50,000 00	
June 1, 1898.....	3½ " —40 "	June 1, 1938.....	50,000 00	
Aug. 1, 1898.....	3½ " —40 "	Aug. 1, 1938.....	100,000 00	
Aug. 1, 1899.....	3½ " —40 "	Aug. 1, 1939.....	100,000 00	
July 2, 1900.....	3½ " —40 "	July 2, 1940.....	50,000 00	
Nov. 1, 1900.....	3½ " —40 "	Nov. 1, 1940.....	50,000 00	
Nov. 1, 1901.....	3½ " —40 "	Nov. 1, 1941.....	100,000 00	$1,300,000 00

PAVING LOAN.

Nov. 1, 1892.....	4 per cent.—10 yrs....	Nov. 1, 1902.....	$50,000 00	
Oct. 1, 1897.....	3½ " —10 "	Oct. 1, 1907.....	20,000 00	$70,000 00

PUBLIC LIBRARY LOAN.

Nov. 1, 1901.....	3½ per cent.—20 yrs....	Nov. 1, 1921.....		$27,000 00

SCHOOLHOUSE LOAN.

Nov. 1, 1892.....	4 per cent.—10 yrs....	Nov. 1, 1902.....	$20,000 00	
Oct. 1, 1896.....	4 " —20 "	Oct. 1, 1916.	6,000 00	
July 1, 1897.....	3½ " —20 "	July 1, 1917.	100,000 00	
Nov. 1, 1897.....	3½ " —10 "	Nov. 1, 1907.....	9,500 00	
May 2, 1898.....	3½ " —20 "	May 2, 1918.....	100,000 00	
June 1, 1898.....	3½ " —20 "	June 1, 1918.....	50,000 00	
Aug. 1, 1898.	3½ " —20 "	Aug. 1, 1918.....	142,000 00	
July 1, 1899.....	3½ " —20 "	July 1, 1919.....	42,000 00	
Nov. 1, 1899.....	3½ " —20 "	Nov. 1, 1919.....	13,000 00	
July 1, 1901.....	3½ " —20 "	July 1, 1921.....	76,000 00	$558,500 00

SEWER LOAN.

July 1, 1873.....	6 per cent.—30 yrs....	July 1, 1903.....	$136,000 00	
July 1, 1874.....	6 " —30 " ...	July 1, 1904.....	295,000 00	
July 1, 1875.....	6 " —30 "	July 1, 1905.....	144,000 00	
Nov. 1, 1887.....	4 " —20 "	Nov. 1, 1907.....	30,000 00	
Nov. 1, 1889.....	4 " —20 "	Nov. 1, 1909.....	22,000 00	
May 1, 1890.....	4 " —20 "	May 1, 1910.....	15,000 00	
July 1, 1891.....	4 " —20 "	July 1, 1911.....	15,000 00	
Aug. 1, 1894.....	4 " —30 "	Aug. 1, 1924.....	75,000 00	
Oct. 1, 1895.....	4 " —30 "	Oct. 1, 1925.....	60,000 00	
Oct. 1, 1896.....	4 " —20 "	Oct. 1, 1916.....	75,000 00	
Nov. 1, 1899.....	3½ " —30 "	Nov. 1, 1929.....	42,000 00	
July 2, 1900.....	3½ " —30 "	July 2, 1930.....	100,000 00	
Aug. 1, 1901.....	3½ " —30 "	Aug. 1, 1931.....	110,000 00	$1,119,000 00

STREET LOAN.

May 2, 1892.... ...	4 per cent.—10 yrs...	May 2, 1902.....	$55,000 00	
Aug. 1, 1894.....	4 " —20 "	Aug. 1, 1914.....	30,000 00	
Oct. 1, 1895.... ...	4 " —20 " ...	Oct. 1, 1915.....	60,000 00	
Oct. 1, 1896.....	4 " —20 "	Oct. 1, 1916.....	137,000 00	
Nov. 1, 1897.....	3½ " —10 "	Nov. 1, 1907.....	11,000 00	
May 2, 1898.....	3½ " —20 "	May 2, 1918.....	15,000 00	
Nov. 1, 1899.....	3½ " —20 "	Nov. 1, 1919.....	5,000 00	
Nov. 1, 1900.....	3½ " —20 "	Nov. 1, 1920.....	21,000 00	
July 1, 1901.....	3½ " —20 "	July 1, 1921.....	54,000 00	$388,000 00

Amount carried forward $4,928,400 00

Amount brought forward	$4,928,400 00

STREET WIDENING LOAN.

July 1, 1873.....	6 per cent.—30 yrs....	July 1, 1903... ...	$10,000 00	
July 1, 1874.....	6 " —30 "	July 1, 1904.....	90,000 00	
July 1, 1875.... ...	6 " —30 "	July 1, 1905..	14,000 00	$114,000 00

TOTAL FUNDED CITY DEBT	$5,042,400 00

THE FUNDED WATER DEBT.

There has been an addition to the Water Debt during the year by the issue of registered 3½ per cent. bonds as follows :—

July 1, 1901, due July 1, 1921	$30,000 00

	1900.	1901.	Increase.	Decrease.
Funded Water Debt.....	$3,302,100 00	$3,332,100 00	$30,000 00	.....
Sinking Fund of Water Works....	804,326 58	957,731 54	153,404 96	.....
Net Funded Water Debt.....	$2,497,773 42	$2,374,368 46	$153,434 96	$123,404 98

Following is a statement of the total Funded Water Debt of the City, with rates of interest thereon :—

Date of Issue.	Rate of Interest.	When Due.	Amount.	Total.
Nov. 1, 1886.....	3½ per cent.—20 years..	Nov. 1, 1906.....	$43,000 00	
Oct. 1, 1887.....	4 " —20 " ..	Oct. 1, 1907.....	90,000 00	
Nov. 1, 1887.....	4 " —20 " ..	Nov. 1, 1907.....	22,000 00	
July 1, 1888.....	4 " —20 " ..	July 1, 1908.....	46,000 00	
Aug. 1, 1888.....	4 " —20 " ..	Aug. 1, 1908. ...	25,000 00	
July 1, 1889.....	4 " —20 " ..	July 1, 1909.....	20,000 00	
May 1, 1885	4 " —25 " ..	May 1, 1910.....	288,000 00	
July 1, 1890.....	1 " —20 " ..	July 1, 1910.....	75,000 00	
Sept. 1, 1890.....	4 " —20 " ..	Sept. 1, 1910.....	125,000 00	
Jan. 1, 1891.....	4 " —20 " ..	Jan. 1, 1911.....	20,000 00	
Oct. 1, 1891.....	4 " —20 " ..	Oct. 1, 1911.....	35,000 00	
Jan. 1, 1892.....	4 " —20 " ..	Jan. 1, 1912.....	150,000 00	
May 2, 1892.....	4 " —20 " ..	May 2, 1912.....	75,000 00	
Nov. 1, 1892	4 " —20 " ..	Nov. 1, 1912.....	45,000 00	
Feb. 1, 1893	4 " —20 " ..	Feb. 1, 1913.....	100,000 00	
Aug. 1, 1893.....	4 " —20 " ..	Aug 1, 1913.....	50,000 00	
April 1, 1895.....	4 " —20 " ..	April 1, 1915.....	200,000 00	
Aug. 1, 1895.....	4 " —20 " ..	Aug. 1, 1915.....	200,000 00	
April 1, 1894.....	4 " —30 " ..	April 1, 1924.....	300,000 00	
April 1, 1896.....	4 " —20 " ..	April 1, 1916.....	100,000 00	
July 1, 1896.....	4 " —20 " ..	July 1, 1916.....	200,000 00	
Aug. 1, 1896.....	4 " —20 " ..	Aug. 1, 1916.....	100,000 00	
Oct. 1, 1896.....	4 " —20 " ..	Oct 1, 1916.....	265,100 00	
April 1, 1897.....	3½ " —20 " ..	April 1, 1917.....	200,000 00	
July 1, 1897.....	3½ " —20 " ..	July 1, 1917.....	100,000 00	
Nov. 1, 1897.....	3½ " —20 " .	Nov. 1, 1917.....	75,000 00	
Dec. 1, 1897.....	3½ " —20 " ..	Dec. 1, 1917.....	140,000 00	
May 2, 1898.....	3½ " —20 " ..	May 2, 1918. ..	50,000 00	
June 1, 1898.....	3½ " —20 " ..	June 1, 1918.....	60,000 00	
Nov. 1, 1898.....	3½ " —20 " ..	Nov. 1, 1918.....	50,000 00	
Nov. 1, 1899.....	3½ " —20 " ..	Nov. 1, 1919.....	23,000 00	
Nov. 1, 1900.....	3½ " —20 " ..	Nov. 1, 1920.....	30,000 00	
July 1, 1901.....	3½ " —20 " ..	July 1, 1921.....	30,000 00	$3,332,100 00

RECAPITULATION.

Amount of funded City Loan upon which interest is at 6 per cent.	$689,000 00	
Amount of funded City Loan upon which interest is at 4 per cent.	2,258,000 00	
Amount of funded City Loan upon which interest is at 3½ per cent.	1,995,400 00	
Amount of funded City Loan upon which interest is at 3 per cent.	100,000 00	
		$5,042,400 00
Amount of Water Loan upon which interest is at 4 per cent.	$2,531,100 00	
Amount of Water Loan upon which interest is at 3½ per cent.	801,000 00	
		$3,332,100 00

Temporary loans for the past twelve years, and interest upon the same : —

Year.	Temporary Loan.	Interest paid upon Loan.	Year.	Temporary Loan.	Interest paid upon Loan.
1890	$425,000	$7,570 57	1896	$786,000	$12,344 07
1891	465,000	10,796 25	1897	600,000	6,186 40
1892	516,000	8,015 51	1898	500,000	9,642 86
1893	541,850	11,560 32	1899	550,000	6,968 86
1894	125,000	3,106 15	1900	600,000	9,961 96
1895	550,000	6,194 64	1901	550,000	6,759 03

THE TRUST FUNDS

Assumed by the City are held by trustees, and interest is paid upon them at the rate of 6 per cent. annually, as follows : —

Name of Fund.	Amount.	Interest.	
Daniel White Charity Fund	$5,000	At 6 per cent	$300
Dowse Institute Fund	10,000	At 6 per cent	600
Sanders Temperance Fund	10,000	At 6 per cent	600
	$25,000		$1,500

CEMETERY FUND.

Amount of Fund Nov. 30, 1900		$49,161 55

RECEIVED.

For perpetual care of lots in Cambridge Cemetery	$5,279 63		
Interest on investments	1,834 78		
Deed Trust Lot	102 00		
Amounts carried forward		$7,216 41	$49,161 55

Amounts brought forward	$7,216 41	$49,161 55
EXPENDED.		
For care of lots in Cambridge Cemetery	$1,834 78	5,381 63
Amount of Fund Nov. 30, 1901		$54,543 18
The Fund is held in trust and is invested as follows :—		
City of Cambridge Bonds	$44,400 00	
Cambridgeport Savings Bank	10,143 18	$54,543 18

SINKING FUND "CAMBRIDGE BRIDGE."

Amount of Fund Nov. 30, 1900	$625 00
Interest accumulations (1901)	20 89
Appropriation for 1901	2,000 00
	$2,645 89

SINKING FUND "HARVARD BRIDGE."

Amount of Fund Nov. 30, 1900	$112,279 04
Interest accumulations (1901)	3,628 66
Appropriation for 1901	9,500 00
	$125,407 70

SINKING FUND "PARK."

Amount of Fund Nov. 30, 1900	$81,865 51
Interest accumulations (1901)	2,474 38
Appropriation for 1901	21,208 33
	$105,548 22

SINKING FUND "CLAY LAND."

Amount of Fund Nov. 30, 1900	$15,516 15
Interest accumulations (1901)	468 97
Appropriation for 1901	5,335 00
	$21,320 12

SINKING FUND "IMPROVED SEWERAGE."

Amount of Fund Nov. 30, 1900	$840 00
Interest accumulations (1901)	25 39
Appropriation (1901)	3,372 50
	$4,237 89

SINKING FUND "GENERAL."

Amount of Fund Nov. 30, 1900	$810,340 30
Interest accumulations (1901)	29,916 24
Appropriation for 1901	117,436 00
	$957,692 54
EXPENDED.	
For Commissioners of Sinking Funds	175,000 00
Amount of Fund Nov. 30, 1901	$782,692 54

COMMISSIONERS OF SINKING FUNDS.

Amount of Funds Nov. 30, 1900			$1,021,466 00
Harvard Bridge	$112,279 04		
Park	81,865 51		
Clay Lands	15,516 15		
General	810,340 30		
Cambridge Bridge	625 00		
Improved Sewerage	840 00		
	$1,021,466 00		

RECEIVED.

From City Treasurer, appropriation for 1901 :—			
Harvard Bridge	$9,500 00		
Park	21,208 33		
Clay Lands	5,335 00		
General	117,436 00		
Cambridge Bridge	2,000 00		
Improved Sewerage	3,372 50		
		$158,851 83	
Interest accumulations		36,534 53	
			195,386 36
			$1,216,852 36

EXPENDED.

For matured Bridge Loan Bonds	$15,000 00		
Schoolhouse Bonds	160,000 00		
			175,000 00
Amount of Fund Nov. 30, 1901			$1,041,852 36

TRUSTEES OF SINKING FUND OF WATER WORKS.

Amount of Fund Nov. 30, 1899			$804,326 58
From City Treasurer, for amount due and appropriated by the City Council from the Revenue of the Water Works		$122,352 80	
Interest accumulations		17,773 49	
Sale of old reservoir site		13,278 67	
			153,404 96
Amount of Fund Nov. 30, 1901			$957,731 54

ABATEMENTS — TAXES.

	Real.	Personal.	Polls.	Total.
Taxes of 1896	.....	$101 94	$4 35	$106 29
" " 1897	.....	134 25	22 00	156 25
" " 1898	.....	243 42	46 00	289 42
" " 1899	$17 10	346 35	34 00	397 45
" " 1900	2,471 55	8,211 48	52 00	10,735 03
" " 1901	6,022 45	6,499 33	124 00	12,645 78
Street Watering	.....	.....	.....	45 34
Refund of Costs	.....	.....	.....	14 82
	$8,511 10	$15,536 77	$282 35	$24,390 38

TAXES.

The amount of taxes assessed by the Board of Assessors on the real and personal estates and polls of Cambridge, for the year 1901, was as follows:—

Valuation of real estate	$78,568,300.00
Valuation of personal estate	17,648,575.00
	$96,216,875.00
Assessed at $16.90 per $1,000 gives	$1,626.065.1875
25,306 polls at $2	50,612.0000
Bank stock (non-residents separately assessed)	6,253.4225
	$1,682,930.6100

The tax is divided as follows:—

For City purposes*	$1,446 054.2200
County assessments	100,429 8900
Overlay	2,058.1475
State assessments	128,134.9300
State charge for non-resident bank stock	6,253 4225
	$1,682,930.6100

Increase in number of polls since last year:—

189 polls at $2	$378.00
Increase in real estate valuation	1,967,600.00
Decrease in personal valuation	216,655 00
Gain in valuation since last year	$1,751,323 00
Number of houses in 1901	13,846.50
Number of houses in 1900	13,713.00
Number of houses built during the past year	133.50
Number of horses assessed	4,618
Number of cows assessed	175
Number of swine assessed	58

POLLS AND VALUATION OF POLLS AND ESTATES, MAY 1, 1899.

Wards.	Polls.	Valuation of Polls.	Personal.	Real Estate.	Total Real and Personal.	Dwellings.	Total Tax.
One	4,204	$8,408 00	$7,186,200	$21,064,600	$28,250,800	2 706	$491,496.68
Two	7 554	15 108 00	3,642,275	16,670,800	20,313,075	3,586	362,461.5825
Three	3,783	7,566 00	2,030,820	9,802,400	11,833,220	1,604	209.914.062
Four	5,905	11,810 00	2,418,700	15,156,400	17,575,100	3,313	312,344.21
Five	3,549	7,098 00	1,714,000	11,856,600	13,570,600	2,379	239,155.26
Totals	24,995	$49,990 00	$16,991,995	$74,550,800	$91,542,795	13,588	$1,615,371 7945

*To meet the city expenses the income from various departments is added to this sum raised by taxation.

POLLS AND VALUATION OF POLLS AND ESTATES, MAY 1, 1900.

Wards.	Polls.	Valuation of Polls.	Personal.	Real Estate.	Total Real and Personal.	Dwellings.	Total Tax.
One	4,229	$8,458 00	$7,746,700	$21,681,700	$29,428,400	2,792	$505,797.96
Two	7,690	15,380 00	3,767,685	16,986,500	20,754,185	3,716	366,125.7265
Three	3,717	7,434 00	2,053,245	10,002,900	12,056,145	1,608	211,182.8505
Four	5,717	11,434 00	2,502,000	15,736,400	18,238,400	3,342	319,662.96
Five	3,764	7,528 00	1,795,600	12,193.200	13,988,800	2 255	243,938.72
Totals	25,117	$50,234 00	$17,865 230	$76,600,700	$94,465,930	13,713	$1,646,708.2170

POLLS AND VALUATION OF POLLS AND ESTATES, MAY 1, 1901.

Wards.	Polls.	Valuation of Polls.	Personal.	Real Estate.	Total Real and Personal.	Dwellings.	Total Tax.
One	4,234	$8,468 00	$7,536,300	$22,540,800	$30,077,100	2,722	$516 770.99
Two	7,807	15,614 00	3,802,460	17,179,400	20,981,860	3,698 2-3	370,207.434
Three	3,697	7,394 00	2,154,615	10,113,700	12,268,315	1,615	214,728.5235
Four	5,795	11,590 00	2,487,100	16,341,900	18,829,000	3,345	329,8[illegible]0.10
Five	3,773	7,546 00	1,668,100	12,392,500	14,060,600	2,465 5-6	245,170.14
Totals	25,306	$50,612 00	$17,648,575	$78,568,300	$96,216,875	13,846 1-2	$1,676,677.1875

Statement of the valuations of the personal property and real estate of the City of Cambridge, with the number of polls, dwellings, and rate of taxation for the past twelve years :—

Year.	Polls.	Personal.	Real Estate.	Total.	Dwellings.	Rate per $1,000.
1890	19,221¾	$15,339,925	$52,235,000	$67,574,925	10,615	$15 60
1891	20,731¼	16,508,770	54 167,914	70,676,684	10,932	15 50
1892	22,013¼	17,687,595	56,668,100	74,355,695	11,359	15 00
1893	22,752	17,511,089	58,782,900	76,293.989	11,768	16 40
1894	22 172	16,658,320	60,877,300	77,535,620	12,262	15 80
1895	22 781	16,607,360	64.303,700	80,911,060	12,305	15 70
1896	23,847	15.914,995	67,835,100	83,750,095	12,723	15 10
1897	24,407	16,302,545	70,339,200	86,641,745	13,217	17 50
1898	24,628	16,642,990	72,908,100	89,551,090	13,473	16 40
1899	24,995	16,991,995	74,550,800	91,542,795	13,588	17 10
1900	25,117	17,865,230	76,600,700	94,465,930	13,713	16 90
1901	25,306	17,648,575	78,568,300	96,216,875	13,846½	16 90

Abatements and discounts upon taxes for the past twelve years, and amount of tax uncollected December 1, 1901 :—

Year.	Total Tax.	Total Abatement.	Total Discounts.	Amount of Tax uncollected December 1, 1901.
1890	$1,099,741 38	$20.966 82	$28,012 44	.....
1891	1,143,712 67	21,343 12	.....	.....
1892	1,240,186 50	21,636 54	.....	.....
1893	1,303,639 84	24,678 10	.....	.....
1894	1,278.899 72	26,926 07	.....	.....
1895	1,324,613 76	19,427 40	.....	$4,209 17
1896	1,321,932 65	17,922 54	.....	18,982 36
1897	1,574,047 50	22,081 73	.....	27,165 12
1898	1,527,863 88	27,566 98	.....	27,914 60
1899	1,623,592 35	35,317 61	.....	24,530 93
1900	1,654,588 36	33,005 90	.....	31,919 53
1901	1,683,690 84	24,390 38	.....	339,831 95

The valuation of estates in this City, for the years hereinbefore mentioned, are the same as originally made by the Board of Assessors, during those years, and the same figures were reported by that Board to the Tax Commissioners for each of the years respectively. These valuations were subject to changes in each year, after such report was made, as shown by the following: —

Net valuations of estates in the City of Cambridge, for the past three years, after adding the amounts of all supplementary warrants and deducting therefrom all abatements: —

Year.	Total Valuation.	Abatements.	Net Valuation.
1899	$91,596,491	$1,663,611	$89,932,880
1900	94,690,830	1,796,597	92,894,233
1901	96,233,575	740,934	95,492,641
	$282,520,896	$4,201,142	$278,319,754

BORROWING CAPACITY.

The average net valuation of the City of Cambridge for the years 1899, 1900 and 1901 . . . . $92,773,251 00

This last sum represents the amount upon which the limit of the rate of taxation, and also of municipal indebtedness is fixed under the provisions of Chapter 312 of the Acts of the year 1885.

2½ per cent on same is		$2,319,331 27
The entire City Debt is	$5,042,400 00	
Of this amount the following loans are not within the legal debt limit, being exempted by the following Acts of the Legislature: —		
Cambridge Bridge Loan.		
Acts of 1898, Chapter 467 . . .	$350,000 00	
Clay Land Loan.		
Acts of 1896, Chapter 175 . . .	97,000 00	
Harvard Bridge Loan.		
Acts of 1887, Chapter 282 Acts of 1888, Chapter 73 Acts of 1891, Chapter 311 . .	400,000 00	
Park Loan.		
Acts of 1892, Chapter 341 Acts of 1893, Chapter 337 Acts of 1894, Chapter 89 Acts of 1897, Chapter 469 Acts of 1899, Chapter 221 . .	1,300,000 00	
Sewer Loan.		
Acts of 1899, Chapter 189 Acts of 1899, Chapter 473 . .	242,000 00	
	$2,389,000 00	
Amounts carried forward	$2,653,400 00	$2,319,331 27

Amounts brought forward		$2,653,400 00	$2,319,331 27
The entire Sinking Fund is . . .	$1,041,852 36		
Of this amount there should be deducted on account of Exempted Loans :—			
"Harvard Bridge" . .	$125,407 70		
"Park"	105,548 22		
Clay Lands . . .	21,320 12		
Cambridge Bridge . .	2,645 89		
Improved Sewerage . .	4,237 89		
	259,159 82		
Net Sinking Fund . .		782,692 54	
Net City Debt, December 1, 1901			1,870,707 46
Borrowing capacity for City purposes, December 1, 1901 . . .			$448,623 81

ACTS OF 1885, CHAPTER 312.

"AN ACT TO LIMIT MUNICIPAL DEBT OF AND THE RATE OF TAXATION IN CITIES.

"Be it enacted, etc., as follows :—

"SECTION 1. The taxes assessed on property in any city, except the City of Boston, exclusive of State Tax, County Tax and sums required by law to be raised on account of the City Debt, shall not exceed in any year twelve dollars on every one thousand dollars of the average of the assessors' valuations of the taxable property therein for the preceding three years, the valuation being first reduced by the amount of all abatements allowed thereon, previous to the thirty-first day of December in the year preceding said assessment, and any order or appropriation requiring a larger assessment than is herein limited shall be void.

"SECT. 2. The limit of indebtedness of cities shall hereafter be two and one-half per cent. on the average valuation prescribed in Section one of this act."

TAX LEVY.

Average net valuation for 1899, 1900, and 1901	$92,773,251 00
Assessed at $12 per $1,000 gives	1,113,279 00

Which is the legal limit of taxation for municipal purposes for 1901, outside of the Sinking Fund requirements, Interest on the Debt and State and County Tax, unless advantage is taken of the following Legislative Act of 1893 :—

ACTS OF 1893, CHAPTER 247.

"AN ACT AUTHORIZING ASSESSORS IN CITIES OF LESS THAN ONE HUNDRED THOUSAND INHABITANTS TO USE THE VALUATION OF THE YEAR PRECEDING AS A BASIS OF TAXATION.

"Be it enacted, etc., as follows :—

"SECTION 1. In every city containing less than one hundred thousand inhabitants, the taxes assessed on property, exclusive of State Tax, County Tax and sums required by law to be raised on account of City Debt, shall not exceed in any year twelve dollars on every one thousand dollars of the assessors' valuation of the taxable property therein for the preceding year, said valuation being first reduced by the amount of all abatements allowed thereon previous to the thirty-first day of December in the year preceding said assessment, and any order or appropriation requiring a larger assessment than is herein limited shall be void; but, the City Council of any city coming within the provisions of this Act, may, in any year, decide that the taxes assessed shall be raised in accordance with the provisions of Section one of Chapter three hundred and twelve, of the Acts of the year eighteen hundred and eighty-five."

In which case the net valuation for 1901 being	$95,492,641 00
Assessed at $12 per $1,000 gives	1,145,912 00

BALANCE SHEET OF THE CITY OF CAMBRIDGE, DECEMBER 1, 1901, SHOWING ASSETS AND LIABILITIES.

	Assets.	Liabilities.
Betterments	$562 93	
Cemetery Fund	54,543 18	
City Debt (Contingent)		$200,000 00
City of Cambridge (City Property)	5,688,426 71	
City Treasurer (Cash)	276,544 65	
Daniel White Charity (Trust Fund)		5,000 00
Dowse Institute Fund (Trust Fund)		10,000 00
Funded City Debt		5,042,400 00
Funded Water Debt		3,332,100 00
Park Betterments	72,322 55	
Park Betterments Lien	14,117 69	
Sanders Temperance Fund (Trust Fund)		10,000 00
Sinking Funds	1,041,852 36	
Sinking Fund of Water Works	957,731 54	
Taxes due the City	474,553 66	
Tax Liens	19,305 80	
Tax Sale "Surplus"		461 07
	$8,599,961 07	$8,599,961 07

ESTIMATED REVENUE AND ACTUAL REVENUE FOR THE YEAR ENDING NOVEMBER 30, 1901.

	Actual.	Estimated.
Bridge Department	$390 00	$400 00
Cemetery Department	17,466 39	17,500 00
City Clerk Department	2,751 90	3,000 00
Contingent Fund	623 37	
Electrical Department:		
Inspection of Wires	166 42	100 00
Lamp Department	67 00	
Engineering Department	32 00	
Fire Department	100 00	100 00
Health Department	45 72	
Inspection of Milk and Vinegar	200 50	150 00
Interest	11,704 83	9,500 00
Law Department	500 00	500 00
Overseers of the Poor	18,144 34	16,600 00
Park Department	3,257 81	2,400 00
Plumbers' Examiners	49 50	35 00
Police Department	6,079 70	6,000 00
Public Library	5,226 53	5,380 00
Public Property	11,614 77	10,600 00
School Department	7,553 52	6,100 00
Sealer of Weights and Measures	802 52	525 00
Sewer Department	7,614 76	8,300 00
State Aid	15,621 17	16,000 00
Stationery and Printing	1,134 35	1,000 00
Street Department	34,012 87	33,500 00
Treasury Department	2,661 74	2,500 00
Water Works	336,968 51	339,000 00
Betterments, Parks	771 68	
Taxes:		
Corporation	82,813 60	82,000 00
National Bank	9,605 98	9,000 00
Taxes of 1901	1,343,858 89	1,433,690 84
Old Taxes	297,452 01	285,000 00
	$2,219,292 38	$2,288,880 84

After the annual appropriations had been made the following additional appropriations were made to be provided for by City Loans, viz. :—

	Appropriation.	Loan Issued for.
Land for School House, Ward Two	$9,500 00	.....
Land and Buildings for Temporary Hospital for Contagious Diseases..	10,000 00	$9,000 00
New School House, Ward Two	80,000 00	.....
Public Library Addition	30,000 00	27,000 00
Sanitary Arrangements in Gannett, Lassell, Riverside and Tarbell School Houses, also new boilers in Rindge Manuel Training School,	30,000 00	27,000 00
	$159,500 00	$63,000 00

TRANSFERS.

The following transfers were made from the appropriations mentioned, to make up deficiencies occurring in the appropriations to which transfers were made, viz. :—

From the Appropriation for	Amounts.	To the Appropriation for	Amounts.
Contingent Fund	$19,366 39	Assessors' Department	$658 06
		Board of Survey	500 00
		Cemetery Department	150 12
		Health Dept., Temporary Hospital.	3,989 73
		Overseers of the Poor, City Home..	1,200 00
		House Offal.	1,615 49
		Park Department, Maintenance	2,050 00
		Police Department..	4,458 58
		Public Property, City Buildings	450 98
		Incidentals..	600 00
		School Houses	1,204 72
		School Dept., Care of Tenants	118 69
		Incidentals	335 70
		Text Books & Supplies	786 75
		Sealer of Weights and Measures	363 73
		Stationery and Printing	200 00
		Street Dept , Watering..	683 84
City Clerk Department...	92 00	City Clerk Dept., Printing Town Records	92 00
Health Department	500 00	Health Dept., Temporary Hospital.	500 00
Street Department, Maintenance...	1,730 00	Street Dept., Bridges	900 00
		Collection of Ashes...	830 00
Water Works, Maintenance	500 00	Water Works, Ice for Drinking Fountains	500 00
Bridge Department	450 00		
Electrical Department, Lamps	200 00		
Engineering Department	200 00		
Fire Department	750 00		
Interest	1,600 00		
Overseers of the Poor, City Home..	250 00		
Outside Aid.	1,900 00		
Public Property, Incidentals	150 00		
School Departm't, Salaries	1,300 00		
Vacation Schools	100 00		
Sewers, Maintenance	1,050 00		
Treasury Department	400 00	Contingent Fund	8,350 00

COMPARATIVE STATEMENT BY DECADES FROM 1855 TO 1900.

	1855.	1865.	1875.	1885.	1895.	1900.
Population	20,637	29,112	47,838	59,660	81,643	91,886
Valuation	$15,437,100 00	$26,085,900 00	$66,623,014 00	$55,346,555 00	$80,911,060 00	$94 465,659 30
City Tax	100,604 53	267,708 60	1,060,396 52	804,800 00	1,103,455 30	1,395,452 98
County Tax ...	10,137 78	18,280 99	37,580 73	29,381 54	73,887 84	85,997 56
State Tax	5,190 00	118,487 00	58,880 00	44,835 00	46,800 00	48,195 00
Tax rate per $1,000.....	7 10	15 00	17 00	15 50	15 70	16 90
Total Expenditures	173,533 58	536,911 82	2,605,267 74	2,354,298 69	3,686,702 54	3,371,183 99
City Debt	146,600 00	833,092 00	4,106,843 21	2,361,396 50	3,913,634 23	3,592,904 00
Expenditures by Depts:—						
Bridges	890 31	9,007 77	39,068 39	11,829 77	16,297 33	20,179 38
Cemeteries..	6,553 67	16,742 29	19,438 66	80,399 22	16,999 40	21,603 34
Fire Dept. ..	9,623 70	21,958 74	89,949 99	59,341 15	104,898 59	90,362 64
Lighting Sts.	2,987 32	9,062 24	20,919 04	32,269 07	69,926 61	71,998 78
Pauper Dept.	8,520 41	21,481 52	79,719 54	56,338 24	100,841 33	106,154 82
Police Dept..	4,499 56	22,833 14	71,093 35	78,357 73	110,784 22	123,774 68
Public Libr'y	.....	1,111 77	6,040 04	6,643 51	21,034 83	26,267 46
Schools.....	32,169 16	81,842 47	258,985 15	227,511 77	362,353 79	500,540 53
Sewers.....	4,610 68	3,683 07	135,432 28	40,945 40	149,459 89	108,581 11
Streets	14,554 73	35,638 38	155,476 90	148,088 65	252,154 62	279,497 94
WaterWorks	.....	20,327 79	234,431 03	485,691 04	758,054 81	353,607 18

EXPENDITURES OF THE DIFFERENT DEPARTMENTS FROM 1892 TO 1901, INCLUSIVE.

Names of Departments.	Expended in 1892.	Expended in 1893.	Expended in 1894.	Expended in 1895.	Expended in 1896.	Expended in 1897.	Expended in 1898.	Expended in 1899.	Expended in 1900.	Expended in 1901.
Ambulance Department	.....	.....	$625 00	$2,269 15	$2,452 39	.....	.....	.....	.....	.....
Assessors' Department	$10,665 86	$10,922 58	10,919 65	12,797 40	12,943 24	$13,077 44	$13,552 25	$13,489 10	$13,498 95	$14,158 06
Auditing Department	3,167 32	3,445 86	3,983 67	3,352 03	3,567 88	3,511 12	3,489 04	3,470 88	3,571 13	3,649 85
Cemetery Department	16,791 09	19,462 59	17,998 89	16,999 40	20,000 00	19,846 77	19,832 66	19,910 23	21,603 34	20,415 24
City Clerk Department	5,996 68	5,978 12	6,229 55	6,401 25	7,107 04	7,193 53	7,759 82	7,875 84	9,042 78	9,113 18
City Messenger Department	2,518 16	2,525 96	2,587 54	2,645 92	2,763 59	2,799 51	2,859 04	2,555 94	2,562 75	2,599 92
Civil Service Department	225 00	240 50	224 50	275 00	249 97	248 07	248 85	247 05	249 60	249 80
Clerk of Committees Department	3,451 52	3,526 06	3,597 37	3,708 47	3,925 34	3,946 56	3,972 39	3,968 90	3,970 47	3,990 23
Contingent Fund	7,212 36	10,847 07	15,348 28	14,514 68	16,139 18	7,966 46	11,064 33	13,099 91	25 944 42	16,940 96
Election Expenses	10,557 49	12,044 88	9,692 50	9,476 60	12,463 99	9,943 08	10,861 47	9,948 85	10,196 56	10,429 95
Engineering Department	9 902 11	9,644 00	15,279 50	22,743 52	14,211 55	12,969 29	11,147 34	11,224 85	11,187 79	11,050 64
Executive Department	4,387 95	4,641 40	4,825 08	5,362 15	5,414 08	5,299 35	5,184 26	5,182 88	5,263 48	5,394 49
Fire Department	61,016 48	61,627 27	72,488 69	82,171 99	85,467 88	78,687 13	80,15. 89	84,900 23	90,36? 64	91,120 04
Health Department	4,887 62	5,475 37	6,097 88	11,482 98	16,999 55	17,059 35	17,496 64	19,754 04	27,245 46	38,989 68
Inspection of Milk and Vinegar	999 90	1,298 76	1,350 00	1,388 14	1,586 24	1,583 90	1,499 56	1,500 00	1,499 37	1,670 25
Inspection of Provisions, etc	.....	.....	756 06	747 89	793 60	796 19	798 12	793 60	798 05	797 45
Inspection of Wires	12,548 88	9,545 07	10,148 01	10,399 82	11,999 74	10,699 98	11,197 60	14,499 98	10,575 99	10,499 95
Interest	134,036 63	136,877 92	126,289 20	118,099 84	132,099 07	134,396 40	135,795 18	139,432 86	150,015 96	153,313 03
Lamp Department	63,862 68	66,615 93	68,988 81	69,926 61	67,325 31	69,264 96	69,182 20	71,980 42	71,998 78	72,775 75
Law Department	3,044 37	3,206 19	3,272 94	3,970 45	5,197 44	5,189 88	5,192 65	5,632 35	5,038 59	4,980 89
Overseers of the Poor Department	88,370 89	97,570 17	100,810 42	100,841 33	105,379 81	106,373 80	103,983 80	104,845 15	106,154 82	106,629 67
Park Department	.....	339 13	258,276 09	222,475 05	256,490 43	211,783 90	217,188 89	175,065 82	165,856 05	226,104 06
Plumbers' Examiners Department	.....	.....	119 95	153 81	101 05	116 40	111 50	98 75	115 00	115 00
Police Department	104,547 24	111,581 80	110,244 91	110,784 22	110,111 14	113,550 42	116,762 59	116,998 35	123,774 68	128,458 58
Public Library	13,638 57	14,585 44	29.875 62	21,064 83	18,493 00	19,823 36	20.078 38	21.224 67	20,267 46	20.622 00
Public Property	178,324 92	149.280 61	187,922 57	154,289 89	176,264 31	222,216 56	258,628 93	332,503 41	167,857 33	201,949 94
School Department	224,670 38	238,018 21	248,265 10	258 766 08	272,481 50	282,400 45	295,673 51	335,372 89	357,691 51	368,233 67
Sealer of Weights and Measures	1,684 10	1,654 93	1,598 95	1,491 29	1,570 52	1,619 73	1,598 46	1,644 02	1,694 97	1,963 73
Sewer Department	42,324 49	40,597 04	92,635 43	87,553 59	106,688 27	64,231 45	52,828 90	84,996 28	108 581 11	105,215 71
Sinking Fund	91,770 00	104,095 00	100,390 00	106,940 00	93,765 00	104,725 00	111,937 50	118,750 00	133,824 00	137,643 50
State Aid	25,262 30	25,469 80	24,669 55	23,159 91	23,209 03	23,491 36	28,751 62	27,218 27	25,413 88	25,410 73
Stationery and Printing	2,677 87	2,533 89	2,739 13	2,843 14	2,939 79	2,847 32	2,869 03	2,983 88	3,021 32	3.199 56
Street Dept (Roads and Bridges)	310,948 66	243,032 63	285,348 54	259,953 37	323,912 86	412,986 18	249,167 53	326,637 84	373,083 10	509,593 38
Treasury Department	11,[illegible]80 62	12,179 00	12,542 01	13,471 50	13,995 46	14,415 54	14,282 77	14,699 53	15,478 14	15,596 05
Water Works Department	497,772 78	430,846 12	420,688 47	758,054 81	1,045,529 76	794,197 98	634,583 00	367,048 88	353,607 18	367,545 83
Taxes:—										
Abatements	23,647 67	24,678 10	26,926 07	19,427 40	17,922 54	22,081 73	27,566 98	35,317 61	33,005 90	24,390 38
County	60,845 07	63,569 57	68,110 25	73,887 84	78,321 11	73,887 84	79,914 80	87,085 65	85,997 56	100,429 89
Metropolitan Sewer	6,809 57	17,363 62	45,483 43	61,886 21	.....	137,297 30	56,818 94	74,763 08	73,018 92	72,344 93
National Bank	7,459 69	6,659 26	7,372 24	7,136 92	6,632 77	7,995 91	7,459 91	7.681 26	7,167 54	6,935 25
State	54,495 00	77,850 00	62,280 00	46,800 00	54,600 00	54,600 00	48,195 00	48,195 00	48,195 00	55,790 00
Total	$2,102,201 62	$2,029,829 49	$2,467,001 85	$2,729,717 48	$3,131,115 43	$3,075,103 20	$2,739,688 33	$2,712,598 25	$2 668,431 58	$2,950,311 22

APPROPRIATIONS AND EXPENDITURES

THE AMOUNT OF THE SEVERAL APPROPRIATIONS MADE BY THE CITY COUNCIL DURING THE YEAR—THE TRANSFERS FROM ONE APPROPRIATION TO ANOTHER—THE EXPENDITURES IN DETAIL UNDER EACH APPROPRIATION, AND THE UNEXPENDED BALANCES NOVEMBER 30, 1901.

APPROPRIATIONS AND EXPENDITURES

ABATEMENTS, TAXES.

Appropriation		$30,000 00

EXPENDED.

For Abatements on taxes, as per assessors' certificates	$24,375 56	
Refund of costs, as per order of City Council	14 82	
Total		$24,390 38
Balance unexpended		$5,609 62

ASSESSORS DEPARTMENT.

Appropriation	$13,500 00	
Transferred from Contingent Fund	658 06	
		$14,158 06

EXPENDED.

For salaries of Assessors:—			
John M. Davis	$2,000 00		
J. G. Gooch	2,000 00		
A. J. Green	2,000 00		
Assistant Assessors:—			
Edward A. Barnard	348 00		
Henry E. Farrington	312 00		
Warren Ivers	316 00		
George H. Munroe	352 00		
Daniel B. Shaughnessy	248 00		
Clerks:—			
Carrie A. Estes	782 50		
Helen P. Hooker	452 50		
Kittie L. Magoun	330 00		
Jessie I. R. Waterman	782 50		
Temporary Clerks	2,852 33		
		$12,775 83	
Abstracts		107 00	
Box, Chas. Place Box Co.		5 00	
Amounts carried forward		$12,887 83	$14,158 06

ASSESSORS DEPARTMENT — Concluded.

Amounts brought forward		$12,887 83	$14,158 06
For Carriage hire:—			
George F. Whiting & Co.	$11 00		
Whiting & Prescott	8 00		
		19 00	
Car tickets, Boston Elevated Railway Company		60 00	
Cleaning safe, E. S. Jackson		5 56	
Directories		11 00	
Stationery, Printing, etc.:—			
Cambridge Chronicle Company	$ 57 00		
Cotton & Gould	359 37		
J. A. Cummings Printing Co.	600 00		
Stationery Dep't.	103 20		
		1,119 57	
Subscription, Banker and Tradesman		5 00	
Sundries		10 15	
Telephone rent and tolls		39 95	
Total			$14,158 06

AUDITING DEPARTMENT.

Appropriation			$3,650 00
EXPENDED.			
For Salaries of —			
City Auditor, Harry T. Upham	$2,100 00		
Clerk, Esther L. Cogan	780 00		
Temporary Clerks	274 38		
		$3,154 38	
Carpentry, W. H. Norris		37 73	
Desk extension, The Ideal Desk Ext. Co.		5 40	
Stationery, printing, postage, etc.			
Cotton & Gould	$44 60		
J. A Cummings Printing Co.	41 71		
Stationery Department	23 15		
Sundry Persons	6 00		
Thorp & Martin Co.	112 00		
Times Publishing Co.	74 00		
United Typewriter & Supply Co.	10 00		
Edward W. Wheeler	8 00		
John Wilson & Son	108 50		
		427 96	
Sundries		13 98	
Telephone rent and tolls		10 40	
Total			$3,649 85
Balance unexpended			15

BOARD OF SURVEY.

Appropriation		$500 00

EXPENDED.

For Advertising :—			
Cambridge Chronicle Co.	$40 45		
F. S. Hill	34 00		
Press Newspaper Co.	3 44		
Times Publishing Co.	36 30		
		$114 19	
Car Tickets :—			
Boston Elevated Railway Co.		15 00	
Case, W. Fillmore & Co.		32 57	
Clerical Service, John McDuffie		83 33	
Stenography and Typewriting :—			
Annie E. Conley		12 33	
Sundries		11 84	
Total			269 26
Balance Unexpended			$230 74

BRIDGE DEPARTMENT.

Appropriation		$18,400 00
Transferred to Contingent Fund		450 00
		$17,950 00

RECEIVED.

For rents, wharfage, etc.	$390 00	

EXPENDED.

For salaries of :—			
Bridge Commissioner and Harbor Master, Wm. J. Marvin	$800 00		
Clerk, Chas. S. Parsons	250 00		
Draw-tenders and Assistants	8,609 16		
		9,659 16	
Car tickets, Boston Elevated Railway Co.		50 00	
Cash paid for labor and supplies :—			
Jas. A. Gorman	$10 88		
W. B. Hoitt	71 65		
A. W. Smith	26 20		
N. E. Story	63 31		
		172 04	
Cleaning and repairing roadway :—			
Austin Ford & Son	$113 00		
Thos. R. Ingraham	89 50		
Chas. Linehan	9 45		
Thos. O'Hara	10 00		
		221.95	
Current to draw, Cambridge Electric Light Company		150 00	
Electrical work :—			
General Electric Co.		14 84	
Amounts carried forward		$10,267 99	$17,950 00

BRIDGE DEPARTMENT — Continued.

Amounts brought forward		$10,267 99	$17,950 00
For Fuel :—			
Marston Coal Co.	$165 30		
Metropolitan Coal Co.	51 36		
Thomas and Pike Co.	77 72		
		294 38	
Furniture and bedding :—			
J. H. Corcoran & Co.	$13 07		
W. J. Coveney & Co.	14 05		
		27 12	
Hardware, tools and repairs, and supplies :—			
Dodge, Haley & Co.	$111 57		
Geo. W. Hobbs	5 33		
A. M. Robbins	12 36		
L. A. Stingel	82 13		
P. H. Stratton	21 03		
F. A. White	20 48		
Sundry persons	18 40		
		271 30	
Heating and Ventilating, G. L. Stewart		14 00	
Ice, Boston Ice Co.		10 20	
Labor: —			
John W. McAleer		70 00	
Lighting :—			
Boston Electric Light Company	$438 57		
Brookline Gas Light Company	127 75		
Cambridge Electric Light Company	1,280 04		
The Edison Electric Illuminating Co.	297 50		
Welsbach Street Lighting Company	200 00		
		2,343 86	
Lumber :—			
John S. Clary	$286 94		
Geo W. Gale Lumber Company	90 98		
E. B. James Lumber Company	162 14		
Geo. McQuesten & Co.	333 13		
E D. Sawyer & Co.	150 49		
John M. Woods & Co.	11 86		
Wm. H. Wood & Co.	847 61		
		1,883 15	
Oils, paints, etc :—			
S. P. Blackburn & Co.	$6 46		
Merrill, Dexter & Co.	71 45		
Standard Oil Company	16 42		
Sudbury Oil & Supply Co.	8 55		
		102 88	
Paving, Albert A. Libby & Co		169 97	
Plumbing, Edward Moore & Co.		5 02	
Repairing Bridges :—			
Thomas J. Emery	$28 45		
L. M. Ham & Co	25 23		
Geo. Hayes & Co.	22 50		
Miller & Shaw	196 92		
Jos. Ross	186 28		
John T. Scully & Bro.	1,351 01		
		1,810 39	
Amounts carried forward		$17,270 26	$17,950 00

BRIDGE DEPARTMENT — Concluded.

Amounts brought forward		$17,270 26	$17,950 00
For Repairing houses, Nelson F. Nice		64 75	
Repaving Harvard Bridge :—			
Inspector F. A. Daunt	$38 50		
Inspector Timothy Fitzmaurice	84 00		
Watchmen, Jas. A. Gorman,	77 50		
Edw T. Hines	49 00		
"Cabot's Conservo," Samuel Cabot	111 60		
Lumber, Geo. McQuesten & Co.	74 83		
Sundry persons	26 50		
		461 93	
Rope, Harrington, King & Co.		5 77	
Salt, Eastern Salt Co.		13 08	
Stationery, printing, etc :—			
City of Boston	$23 82		
Thos. Groom & Co.	6 69		
		30 51	
Sundries		23 10	
Telephone rent and tolls		15 06	
Typewriting. A. R. Andrews		10 00	
Use of Water, Water Department		20 97	
Watering bridge, Street Department		31 00	
Total			17,946 43
Balance unexpended			$3 57

CAMBRIDGE BRIDGE.

Appropriation		$297,180 02
EXPENDED.		
For salaries of : —		
Commissioner, E. D. Leavitt	$1,250 00	
Chief Engineer, Wm. Jackson	1,500 00	
Assistant Secretary, Walter G. Davis	150 00	
Assistant Engineers : —		
John E. Cheney	$1,000 00	
F. H. Fay	5 00	
Geo. E. Harkness	620 75	
S. A. Jubb	665 12	
M. G. Woodward	900 00	
Draughtsmen : —		
R. D. Gardner	$78 00	
G. H. Hayward	294 00	
H. F. Sawtelle	475 13	
E. C. Sherman	482 62	
Axemen : —		
J. E. Martin	$348 00	
F. J. Steele	386 00	
Amounts carried forward	$8,154 62	$297,180 02

CAMBRIDGE BRIDGE — Continued.

Amounts brought forward . . .	$8,154 62		$297,180 02
For Inspectors : —			
J. P. Carroll	$962 00		
J. R. Hews	817 50		
Messenger, John Mountain . .	371 24		
Rodmen : —			
John F. Gorman	624 26		
Walter E. Hadley	40 50		
Transitmen : —			
Edward Barnwell	163 50		
Fred M. Leonard	355 50		
		11,489 12	
Clerical services : —			
Edw. A. Counihan	$50 00		
Jas. A. McKibben	125 00		
Chas. S. Parsons	125 00		
		300 00	
Analysis of Cement, Henry J. Williams		480 00	
Borings, E. A. Clark		258 66	
Boat, etc , The O. Sheldon Co. . .		18 89	
Carpenter work, John T. Scully & Bro.		280 88	
Carriage hire, James F. Ormond .		8 00	
Cash expended for travelling expenses and sundries : —			
John E. Cheney	$29 10		
William Jackson	104 20		
M. G. Woodward	88 51		
		221 81	
Engineers' Instruments : —			
C. L. Berger & Sons . . .	$69 10		
Frost & Adams Co. . . .	35 00		
		104 10	
Examining title : —			
Wm. V. Thompson		65 00	
Furniture and furnishings : —			
Paine Furniture Co. . . .		8 29	
Hardware, tools and supplies : —			
Dodge, Haley & Co. . . .	$26 48		
J. D. Jewett & Co. . . .	17 34		
Lang & Jacobs	9 00		
		52 82	
Iron Works, Miller & Shaw . .		269 29	
Amounts carried forward		$13,556 86	$297,180 02

CAMBRIDGE BRIDGE — Concluded.

Amounts brought forward		$13,556 86	$297,180 02
For Lumber, E. B. James Lumber Co. .	$272 20		
Geo. H. Jennings	197 62		
Wm. H. Wood & Co. . . .	43 73		
		513 55	
Masonry piers (Contracts) :—			
8 piers, Holbrook, Cabot & Daly .	$106,636 12		
2 " " " " " .	64,550 58		
		171,186 70	
Moulds plate : —			
Riehle Bros. Testing Machine Co. .		39 00	
Moving House, H. S. Angus & Son .		31 00	
Paints, etc. : —			
Wadsworth, Howland & Co. . .		6 34	
Plans, etc., Edmund M. Wheelwright : —			
Professional services . . .	$1,200 00		
Draughting	618 29		
Travelling expenses . . .	29 10		
		1,847 39	
Plumbing : —			
Wm. H. Griffiths & Co. . . .		11 77	
Roof Repairs, Wm. Gordon, . .		16 66	
Rubber boots, W. T. Roop & Co. .		14 92	
Scale Models, John Evans & Co. .		313 50	
Services as counsel for Commission : —			
Edgar R. Champlin		125 00	
Setting, shafting, etc. : —			
Wm. J. Lawler		50 00	
Sheathing Roadway, Temporary Bridge : —			
Joseph Ross	$970 00		
Inspection	175 00		
		1,145 00	
Stationery and printing : —			
City of Boston	$19 64		
J. A. Cummings Print. Co. . .	5 00		
J. L. Fairbanks & Co. . . .	5 62		
Thomas Groom & Co. . . .	7 50		
Rockwell & Churchill . . .	15 50		
		53 26	
Sundries		22 21	
Telephone rent and tolls . . .		47 87	
Typewriting, A. R. Andrews . .		5 00	
Total			188,986 03
Balance unexpended . . .			$108,193 99

CEMETERY DEPARTMENT.

Appropriation		$18,000 00
Transferred from Contingent Fund		150 12
		$18,150 12

RECEIVED.

For brick and slate graves	$453 00		
Burials	4,380 00		
Care	2,213 00		
Chapel	15 00		
Foundations	909 21		
Grading and Sodding	146 00		
Interest on Cemetery Fund	1,834 78		
Sales	7,380 35		
Sundries	135 05		
		17,466 39	

EXPENDED.

For salaries of :—			
Superintendent, Chas. S. Childs	$1,600 00		
Bookkeeper, J. Watson Taylor	1,095 00		
Clerk, Edward J. Brandon	100 00		
Foreman, Henry C. Hobbs	1,003 75		
Laborers	11,851 92		
		15,650 67	
Advertising :—			
Press Newspaper Co.		13 00	
Board walks, Steadman A. Rice		43 00	
Bricks, N. E. Brick Co.		29 00	
Brick graves, John Delaney		10 75	
Canvas, James Martin & Son		17 50	
Carriage hire :—			
Geo. F. Whiting & Co.	$12 50		
Whiting & Prescott	7 00		
		19 50	
Car Tickets :—			
Boston Elevated Railway Co.		40 00	
Clerical Services :—			
Amanda R. Murray		18 00	
Decorating :—			
New England Decorating Co.		24 00	
Dinners, Colonial Club		36 00	
Directories, W. A. Greenough & Co,		6 00	
Disinfectant, C. W. Lerned & Co.		8 00	
Evergreen and Brooms :—			
Stephen Adams		11 00	
Flag, N E. Decorating Co.		5 65	
Fuel, Metropolitan Coal Co.		68 25	
Amounts carried forward		$16,000 32	$18,150 12

CEMETERY DEPARTMENT — Continued.

Amounts brought forward		$16,000 32	$18,150 12
For Grave Boxes :—			
W. L Lockhart & Co. . . .		18 00	
Hardware, tools and repairs, and supplies :—			
Joseph Breck & Sons . . .	$95 15		
Burditt & Bynner	15 00		
E. T. Bynner	52 93		
T. H. Kneeland	19 91		
F. A. White	19 52		
Sundry persons	8 75		
		211 26	
Harness repairs, John J. Hawkes .		16 25	
Hay,Grain, etc., E. R. Luke & Co. .		94 11	
Heating apparatus repairs :—			
D. J. Wild & Co.		6 20	
Horseshoeing, Wm. Balmer . .		18 50	
Hose, etc., Stoughton Rubber Co. .		17 80	
Leather bag, John J. Hawkes . .		7 50	
Lumber and cement :—			
Geo. W. Gale Lumber Co. . .		121 06	
Manure, Jere. Sullivan . . .		108 00	
Marking stones :—			
A. McDonald & Son . . .	$54 75		
Sargent & Co.	148 50		
		203 25	
Mason work, John Delaney . .		31 50	
Plants, trees & seeds :—			
Joseph Breck & Sons . . .	9 00		
J. W. Manning	28 25		
P. O'Brien & Son	81 50		
		118 75	
Resetting buttress posts :—			
Alex. Wight		22 00	
Signs, F. B. Furbish		16 89	
Slate, Bangor Union Slate Co. . .		253 15	
Slate grave vault :—			
W. L. Lockhart & Co. . . .		12 00	
Sods, James Gray		146 25	
Sprinkling :—			
Street Department . . .	$45 00		
Joseph Ray . . , . .	7 00		
		52 00	
Amounts carried forward		$17,474 79	$18,150 12

CEMETERY DEPARTMENT — Concluded.

Amounts brought forward		$17,474 79	$18,150 12
For Stationery, printing, etc. :—			
Amee Bros.	$17 75		
Caustic & Claflin	71 00		
Cotton & Gould	49 75		
J. A. Cummings Printing Co.	19 93		
		158 43	
Stone, John M. Riley		178 08	
Stone dust, James Gray		142 45	
Stone work, John McNamee's Sons		39 72	
Sundries		12 94	
Tablets, Alex. Wight		11 00	
Teaming, Jere. Sullivan		91 02	
Telephone rent and tolls		35 23	
Water supply, City of Cambridge		6 46	
Total			$18,150 12

CEMETERY DEPARTMENT.

Filling Low Lands.

Appropriation			$3,320 85
Filling :—			
Jeremiah Sullivan		$2,265 12	
Total			2,265 12
Balance unexpended			$1,055 73

CITY CLERK DEPARTMENT.

Appropriation			$7,850 00
Transferred to "Town Records"			92 00
			$7,758 00
RECEIVED.			
For fees from sundry persons		$2,751 90	
EXPENDED.			
For salaries of :—			
City Clerk, Edward J. Brandon	$3,000 00		
Assistant City Clerk, A. M. Pear	1,400 00		
		$4,400 00	
Clerks :—			
Amanda R. Murray	$600 00		
Annie E. Conley	600 00		
Temporary Clerks :—			
Margaret A. Dayton	$34 75		
Anne Jacobs	225 00		
		1,459 75	
Advertising,		15 34	
Binding, J. H. H. McNamee		12 25	
Amounts carried forward		$5,887 34	$7,758 00

CITY CLERK DEPARTMENT — Continued.

Amounts brought forward		$5,887 34	$7,758 00
For Canvassing for births :—			
Manuel Andrew	$21 00		
Arthur L. Farrell	39 00		
Emile J. Grenier	52 50		
Warren Ivers	36 00		
Andrew J. Johnson	34 50		
Thos. F. Laffey	18 00		
Jas. E. Lennon	45 00		
Wm. F. McCormick	45 00		
Geo. H. Munroe	43 50		
Patrick J. White	52 50		
		387 00	
Car Tickets :—			
Boston Elevated Railway Co.		5 00	
Directories, Sampson, Murdock & Co.		5 00	
Desk Extension :—			
The Ideal Desk Extension Co.		5 00	
Expressage		9 10	
Furniture, S. H. Harrington		43 00	
Labor, T. J. Denton		27 80	
Laying floor, W. H. Norris		40 00	
Posting and serving notices :—			
Jas. E Lennon	$71 60		
John T. Lynch	8 00		
John H. Tukey	9 00		
		88 60	
Recording deeds, E. O. Childs		340 50	
Reporting births, sundry doctors, etc.		340 50	
Stamps, etc :—			
Boston Stencil and Stamp works		5 00	
Stationery, printing, etc. : —			
T. H. Ball	$5 00		
M. T. Callahan	70 00		
Cambridge Chronicle Co.	33 25		
Cotton & Gould	31 05		
Caustic & Claflin	7 75		
J. Frank Facey	143 70		
John H. Ford	16 50		
Hobbs & Warren Co.	6 00		
E. W. S. Jones	19 00		
Henry M. Meek	5 00		
Stationery Department	146 63		
Times Publishing Co.	21 25		
Edward W. Wheeler	49 00		
		$554 13	
Sundries		33 39	
Telephone rent and tolls		47 38	
Typewriter, Smith Premier T. W. Co.		90 00	
Amounts carried forward		$7,599 19	$7,758 00

CITY CLERK DEPARTMENT — Concluded.

Amounts brought forward	$7,599 19	$7,758 00
For Typewriter repairs, Smith Premier T. W. Co.	10 50	
Typewriter supplies, Wyckoff, Seamans & Benedict	5 00	
Verifying facts for records, W. F. McCormick	135 93	
Total		7,750 62
Balance unexpended . .		$7 38

CITY CLERK DEPARTMENT.

Classified Index.

Appropriation		$500 00
Clerical services	$425 25	
Stationery and printing: —		
Cambridge Chronicle Co. . .	1 50	
The Fred Macey Co. . . .	44 10	
Total		470 85
Balance unexpended . .		$29 15

CITY CLERK DEPARTMENT.

Printing Town Records.

Appropriation			$800 00
Transferred from City Clerk			92 00
			$892 00
EXPENDED.			
For boxes, Cotton & Gould . . .		$5 25	
Clerical Services		13 50	
Engraving, C. J. Peters & Son . .		56 65	
Expressage, Hatch & Co. . . .		9 40	
Printing:—			
J. Frank Facey	$5 00		
Edw. W. Wheeler	11 25		
John Wilson & Son	773 86		
		790 11	
Prints, etc., Jas. H. King . . .		13 05	
Sundries		3 75	
Total			$891 71
Balance unexpended . . .			29

CITY MESSENGER DEPARTMENT.

Appropriation			$2,600 00
EXPENDED.			
For salaries of : —			
City Messenger, Frank L. Pratt	$1,800 00		
Assistant, Frank T. Evans	503 33		
		$2,303 33	
Bands, J. H. Corcoran & Co.		8 75	
Car tickets : —			
Boston Elevated Railway Company		30 00	
Expressage, Hatch & Co.		15 75	
Rent of Post Office Box		10 00	
Stationery, Printing, etc. : —			
Stationery Department		113 39	
Subscriptions, Geo. E. French		6 00	
Sundries		12 50	
Telephone, rent and tolls		100 20	
Total			$2,599 92
Balance unexpended			08

CIVIL SERVICE DEPARTMENT.

Appropriation			$250 00
EXPENDED.			
For salary of clerk, Harry L. Lincoln		$200 00	
Printing : —			
Cambridge Chronicle Company		6 50	
Stationery : —			
Thorp & Martin Company		40 25	
Sundries		3 05	
Total			$249 80
Balance unexpended			20

CLERK OF COMMITTEES DEPARTMENT.

Appropriation			$4,000 00
EXPENDED.			
For salaries of : —			
Clerk of Committees, John McDuffie	$2,400 00		
Assistant, Eben W. Pike	1,200 00		
		$3,600 00	
Amounts carried forward		$3,600 00	$40,000 00

CLERK OF COMMITTEES DEPARTMENT — Concluded.

Amounts brought forward		$3,600 00	$4,000 00
For Advertising : —			
Cambridge Chronicle Company	$7 50		
Sundry persons.	10 04		
		17 54	
Binding, David Farquhar		6 50	
Directories : —			
Sampson, Murdock & Co..	$5 00		
Sundry persons.	6 00		
		11 00	
Massachusetts Year Book : —			
F. S. Blanchard & Co.		6 00	
Stationery, printing, etc. : —			
Cambridge Chronicle Company	$65 60		
Cotton & Gould	5 00		
Stationery Department	112 45		
		183 05	
Stenography : —			
Annie E. Conley	$10 00		
Mary E. Rowen	5 00		
		15 00	
Subscriptions : —			
F. S Hill	$5 00		
Sundry persons	1 50		
		6 50	
Sundries		3 85	
Telephone rent		66 19	
Typewriter and repairs	$60 00		
United Typewriter & Supply Co.	14 60		
		74 60	
Total			$3,990 23
Balance unexpended			$9 77

CONTINGENT FUND.

Appropriation	$20,000 00
Additional Appropriation	8,000 00
Transferred from Sundry Departments	8,350 00
	$36,350 00
Transferred to Sundry Departments	19,366 39
	$16,983 61

RECEIVED.

For copy of Stenographic Report of conduit hearings	$50 00	
Hawkers' and peddlers' licenses	75 00	
Judgement of District Court	117 62	
Liquor licenses	46 00	
Old taxes	85 00	
Amounts carried forward	$373 62	$16,983 61

CONTINGENT FUND — Continued.

Amounts brought forward		$373.62	$16,983 61
For refund on damage case, E. D. Sawyer & Co.		150 00	
Sales of Proprietors' Records, etc.		74 75	
Witness Fees, G. A. A. Pevey		25 00	
		$623 37	

EXPENDED.

For American Digest		28 00	
Century Digest		48 00	
Car tickets for military companies :—			
Boston & Maine R. R.		295 42	
City Council expenses :—			
Salaries :—			
Clerk, Edw. A. Counihan	500 00		
Page, Frank T. Evans	100 00		
Carriage hire	30 00		
Car tickets :—			
Boston Elevated Railway Co.	400 00		
Engrossing resolutions :—			
Frank L. Wells	137 00		
Expenses of Committees :—			
Committee on Accounts :—			
Refreshments	14 00		
Committee on Claims :—			
Carriage hire	17 75		
Refreshments	50 80		
Committee on Finance :—			
Refreshments	57 84		
Committee on Fire Department :—			
Carriage hire	31 50		
Refreshments	8 00		
Committee on Health Department :—			
Carriage hire	9 00		
Committee on Lamps and Wires :—			
Carriage hire	43 00		
Refreshments	29 65		
Committee on Licenses :—			
Carriage hire	19 00		
Refreshments	20 50		
Amounts carried forward	$1,468 04	$371 42	$16,983 61

CONTINGENT FUND — Continued.

Amounts brought forward . . .	$1,468 04	$371 42	$16,983 61
For Expenses of Committees: —			
Committee on Police Department: —			
Refreshments	12 50		
Committee on Public Property: —			
Carriage hire	82 00		
Refreshments	59 90		
Committee on Roads and Bridges: —			
Carriage hire	100 00		
Refreshments	129 00		
Committee on Street Railways: —			
Refreshments	8 65		
Floral emblems	72 50		
Refreshments	46 50		
		1,979 09	
For damages awarded and suits settled: —			
William Bradley	$600 00		
Mary J. Catlin	5 00		
Jos. P. Flynn	140 00		
Mary Gargan	10 00		
Ellen Hannon	115 00		
Cornelius A. Houghton . . .	20 00		
Annie L. McCarthy	110 88		
Mary K. McLeod	8 00		
Honora Moynahan	2,000 00		
Catherine T. O'Rourke . . .	300 00		
Lizzie B. Remie	185 00		
Lloyd W. Scott	100 00		
Jas. J. Shea	50 00		
Wm. H. Smith	35 00		
Jas. H. Stafford	20 00		
John A. Vittum	180 00		
		3,878 88	
Draping City Hall: —			
N. E. Decorating Co. . . .		300 00	
Examination of titles, William V. Thompson		97 90	
Expenses of celebration, July 4th: —			
Announcing at Athletic Meet, Jeremiah Corkery	$5 00		
Badges, Geo. A. Sanford . .	10 75		
Band stands: —			
Fred R. Furbish	25 00		
W. H. Norris	15 80		
Base ball team, A. J. Fells . .	25 00		
Amounts carried forward .	$81 55	$6,627 29	$16,983 61

CONTINGENT FUND — Continued.

Amounts brought forward . . .	$81 55	$6,627 29	$16,983 61
For Expenses of celebration, July 4th : —			
Fireworks :—			
H. H. Tilton & Co. . . .	250 00		
Marsten & Wells	250 00		
Pain's Fireworks	450 00		
Handicapping games, F.X. McGrath	32 60		
Printing :—			
Cambridge Chronicle Co. . .	20 00		
J. Frank Facey	15 10		
Prizes :—			
Glenwood Athletic Club . .	25 00		
Timothy J. Lane . . .	50 00		
John B. McCloskey . . .	295 50		
Timothy Sullivan . . .	50 00		
Refreshments :—			
McDonald Bros.	13 92		
Ralph Perry	4 17		
Rental of lamps, Kitson Hydro-Carbon Heating Co. . . .	15 00		
Rope, E. T. Bynner . . .	18 36		
Services of bands :—			
The Cambridge City Band . .	50 00		
Manual Training School Band .	60 00		
John Rogers	50 00		
Starting games, John W. Bowler .	5 00		
Sundry supplies, Chas. J. P. Lucas	9 30		
Teaming pay-roll	24 50		
Use of chairs, R. N. Burnes . .	10 00		
Use of tent, C. H. Batchelder & Co.	20 00		
		1,800 00	
Expenses on Conduit bill :—			
Copies of newspapers :—			
F. S. Hill	$20 60		
Mercury Pub. Co. . . .	1 00		
The Republican Co. . . .	3 00		
The Worcester Evening Gazette .	1 00		
Expert, David R. Walker . .	75 00		
House document, Wright & Potter Printing Co.	7 50		
Photograph supplies, etc. :—			
Kate M. Hill	2 54		
A. T. Thompson & Co. . .	11 80		
Amounts carried forward .	$122 44	$8,427 29	$16,983 61

CONTINGENT FUND — Continued.

Amounts brought forward . . .	$122 44	$8,427 29	$16,983 61
For Expenses on Conduit bill: —			
Stationery, printing, etc.: —			
Cambridge Chronicle Co. . .	9 50		
J. A. Cummings Printing Co. .	32 25		
Stationery Department . .	5 31		
Sundry persons	3 90		
Louis F. Weston . . .	5 00		
Stenography and Typewriting: —			
Annie E. Conley	11 50		
L. Alberta Felton . . .	195 00		
Miss Lewis	15 10		
		400 00	
Expenses of Inauguration Day: —			
Flowers and plants: —			
P. O'Brien & Son . . .		30 00	
Expenses of Investigating Committee: —			
Professional services: —			
J. B. & H. E. Warner . . .	$757 25		
Refreshments, The E. & R. Lunch	9 90		
Reporting hearings: —			
Bacon & Burpee	424 25		
F. E. Rollins	45 60		
Serving Subpoenas: —			
John T. Lynch	57 65		
David P. Muzzey	12 75		
Summoning witnesses: —			
Henry C. Jones	5 87		
		1,313 27	
Expenses of O'Neill Case: —			
Serving notices, etc: —			
Jas. E. Lennon	$47 10		
Witness fees: —			
N. W. Bunker	3 00		
Jas. E. Lennon	4 50		
		54 60	
Grade crossings: —			
Binding, "Abolition of Grade Crossings": —			
J. H. H. McNamee . . .	$22 00		
Printing: —			
J. A. Cummings Printing Co. .	80 27		
Amounts carried forward .	$102 27	$10,225 16	$16,983 61

CONTINGENT FUND — Continued.

Amounts brought forward . . .	$102 27	$10,225 16	$16,983 61
For Grade Crossings: —			
Plans for grade crossings: —			
Geo. H. Walker & Co. . .	166 00		
		268 27	
Granite marking tablet, "Spreading Chestnut Tree": —			
John J. Horgan		58 60	
Insurance premium on Latin School House: —			
John S. Jacobs & Son . .		771 94	
Liquor licenses: —			
Commonwealth of Massachusetts .		12 50	
Memorial Day Appropriation . .		1,100 00	
Rebates on Park Betterments: —			
Alfred Allcock	$8 49		
Libbie A. Balcom	25 00		
David G. Boyd	10 41		
Wm. A. Cleveland	7 50		
Edw. M. Doran	33 15		
R S. Edwards	75 00		
Edw. P. Kimball	82 03		
Henry A. Locke	200 10		
John Lynch	33 75		
James Mahoney	14 80		
Chas. C Marston	16 83		
Margaret McLean	124 35		
Augustus W. Melvin . . .	30 37		
Hycent Purcell	45 95		
Elizabeth Stewart	21 15		
		728 88	
Refund of excess of taxes: —			
H. O. Bright	$332 07		
Cambridgeport Savings Bank .	136 24		
G. G. Crocker, A. F. Sortwell and F. D. Fisk, Trustees . . .	1,324 80		
Edw., Geo. F. and Jas. H. Kendall	308 63		
Geo. B. Roberts	231 07		
Heirs Benj. Tilton	131 42		
Wm. H. Wood	490 62		
		2,954 85	
Repairs at Ward 3 room for East Cambridge Branch of Library: —			
J. L. P. Ackers, painting, glazing, etc.	$278 72		
Green & Co., heating apparatus .	98 16		
		376 88	
Ringing bells on holidays . . .		78 00	
Amounts carried forward . . .		$16,575 08	$16,983 61

CONTINGENT FUND — Concluded.

Amounts brought forward		$16,575 08	$16,983 61
For Sinking funds :—			
Salaries of :—			
Treasurer of Sinking Funds, W. W. Dallinger . . .	$300 00		
Secretary of Sinking Funds, John McDuffie	25 00		
Rent of Box, Boston Safe Deposit & Trust Co.	40 00		
		365 00	
Telegram to Mrs. McKinley . .		88	
Total			16,940 96
Balance unexpended . . .			$42 65

ELECTION EXPENSES, CITY CLERK.

Appropriation			$5,700 00
EXPENDED.			
For election officers	$3,292 50		
Precinct men	311 00		
Bell ringers	26 00		
Special pay-roll, police officer, clerks, etc.	26 00		
Clerical assistance :—			
Margaret A. Dayton . . .	15 75		
M Alice Dow	10 50		
Anne Jacobs	30 00		
Inspectors :—			
Thos. A. Corcoran . . .	5 00		
Jas. P. Crowley	5 00		
		3,721 75	
Advertising :—			
D. A. Buckley	$19 50		
Cambridge Chronicle Co. . .	81 50		
Cambridge Democrat . .	32 00		
F. S. Hill	81 50		
Press Newspaper Co. . . .	18 06		
Review Publishing Co. . . .	12 00		
Times Publishing Co. . . .	81 50		
		326 06	
Barge hire :—			
A. Nixon	$36 00		
John Nixon	218 00		
		254 00	
Binding and mounting voting lists .		107 35	
Amounts carried forward		$4,409 16	$5,700 00

ELECTION EXPENSES, CITY CLERK — Concluded.

Amounts brought forward		$4,409 16	$5,700 00
For Carriage hire :—			
David Crowley & Co. . . .	$6 00		
F. R. Nickerson	10 00		
G. F. Whiting & Co. . . .	9 00		
Whiting & Prescott . . .	5 00		
		30 00	
Car tickets, Boston Elev. Ry. Co. .		5 00	
Caucus Laws, Richard L. Gay . .		20 25	
Expressage and teaming :—			
P. Biggin	$13 50		
Sundry persons	55		
		14 05	
Hardware and supplies :—			
E. T. Bynner	$12 98		
Morss & Whyte	16 40		
Sundry persons	5 51		
		34 89	
Labor, T. J. Denton		59 20	
Lunches :—			
George H. Murray	$14 84		
W. S. Sprague	31 49		
Sundry persons	6 10		
		52 43	
Painting :—			
M. A. Feeley		35 20	
Posting and serving notices :—			
David Crowley & Co. . . .	$12 00		
Geo. H Munroe	15 00		
P. J. White	18 00		
Sundry persons	9 50		
		54 50	
Preparing tabulation for election returns :—			
George Davis		8 00	
Services, M. L. Wilder . . .		5 00	
Sign cards, Thos. Sweeney . .		8 50	
Stationery, printing, etc. :—			
Boston Stencil and Stamp Works .	$14 50		
Cambridge Chronicle Co. . .	53 00		
Caustic & Claflin	411 50		
Cotton & Gould	118 77		
J A. Cummings Printing Co. .	61 55		
J. Frank Facey	229 00		
Stationery Department . . .	54 26		
		942 58	
Sundries		10 05	
Teaming, P. Biggin		10 50	
Total			5,699 31
Balance unexpended . . .			69

ELECTION EXPENSES, REGISTRARS OF VOTERS.

Appropriation			$3,500 00
	EXPENDED.		
For Salaries of Registrars of Voters and Clerk : —			
James Cox	$500 00		
John P. McCormick	500 00		
F. W. Macdonald	500 00		
Isaac S. Pear	600 00		
		2,100 00	
Clerical assistance : —			
Anne Jacobs	$201 50		
Ella A. Lathrop	5 00		
		206 50	
Clerical assistance at recount : —			
George M Clukas	$13 25		
Frank W. Cone	13 25		
E. A Counihan	13 25		
C. H. Dodge	17 00		
F. T. Evans	20 25		
R. S. Hoffman	5 25		
Warren Ivers	21 50		
H. L. Lincoln	18 00		
G. H. Munroe	13 25		
E. W. Pike	15 00		
J. H. Webber	22 25		
		172 25	
Advertising : —			
Cambridge Chronicle Company	$28 50		
Cambridge Democrat	26 00		
F. S. Hill	28 00		
Press Newspaper Company	15 30		
Times Publishing Company	32 00		
		129 80	
Binding : —			
J. H. H. McNamee		36 10	
Carriage hire : —			
F. R. Nickerson		10 00	
Labor, T. J. Denton		14 45	
Placing lists and rails : —			
W. H. Norris		56 85	
Posting notices : —			
Geo. H. Munroe		32 00	
Stationery, printing, etc : —			
Cambridge Chronicle Company	$627 15		
E. W. S Jones	14 75		
Stationery Department	17 47		
		659 37	
Sundries		5 72	
Total			3,423 04
Balance unexpended			$76 96

ELECTION EXPENSES, SUPERINTENDENT OF PUBLIC BUILDINGS.

Appropriation			$1,400 00
EXPENDED.			
For carpentry, W. H. Norris		$486 30	
Lighting apparatus, Geo. F. Dickson		24 70	
Preparing rooms for voting:—			
Sundry persons		292 60	
Rent:—			
Chas. Beck Post 56, G. A. R.	$50 00		
J. S. Becker	30 00		
Citizen's Trade Association	20 00		
Mt. Sinai Building Association	90 00		
Odd Fellows' Hall Association	20 00		
J. F. O'Brien	50 00		
The Prospect Union	40 00		
T. H. Raymond	8 00		
Red Jacket Vet. Firemen's Assn.	35 00		
St. John's Literary Institute	155 00		
		498 00	
Sundries		6 00	
Total			1,307 60
Balance unexpended			$92 40

ELECTRICAL DEPARTMENT, LAMPS.

Appropriation			$73,000 00
Transferred to Contingent Fund			200 00
			$72,800 00
RECEIVED.			
For Lanterns		$67 00	
EXPENDED.			
For salary of superintendent, Charles F. Hopewell		1,000 00	
Horse board:—			
Prospect Stables	100 00		
Ralph Smith & Co.	$170 75		
		270 75	
Horseshoeing, Wm. Balmer		18 00	
Labor as per pay rolls		70 50	
Lighting streets:—			
Cambridge Electric Light Co:—			
Arc	$51,071 33		
Incandescent	11,560 26		
Cambridge Gas Light Co., repairs	30 35		
Welsbach Street Lighting Co.	8,537 59		
		71,199 53	
Amounts carried forward		$72,558 78	$72,800 00

ELECTRICAL DEPARTMENT, LAMPS — Concluded.

Amounts brought forward		$72,558 78	$72,800 60
For Moving lamps and posts :—			
Cambridge Electric Light Company	$22 76		
Cambridge Gas Light Company	10 05		
		32 81	
Office fittings :—			
Globe Wernicke Company		59 80	
Stationery, printing and typewriter supplies :—			
Cotton & Gould	27 12		
J. A. Cummings printing Company	$19 39		
Louis F. Weston	9 00		
		55 51	
Sundries		11 60	
Telephone rent and tolls		28 25	
Wagon repairs, Chas. Waugh & Co.		29 00	
Total			72,775 75
Balance unexpended			$24 25

ELECTRICAL DEPARTMENT, WIRES.

Appropriation			$10,500 00
RECEIVED.			
For labor and materials		$166 42	
EXPENDED.			
For salaries of :—			
Inspector of Wires, Chas. F. Hopewell	$1,000 00		
Assistants	5,791 07		
Clerk, Lillian W. Hyde	313 00		
		7,104 07	
Apparatus and repairs, and electrical supplies :—			
American Electrical Works	$121 10		
American Steel and Wire Company	166 03		
Crocker-Wheeler Company	9 50		
W. E Decrow	70 10		
Eastern Drug Company	34 15		
Edes Manufacturing Company	34 00		
Electric Gas Light Company	140 48		
Electric Storage Battery Company	40 54		
F. M. Ferrin	102 50		
A. H. Hews & Co.	145 26		
Holtzer-Cabot Electric Company	8 42		
Kellogg Switchboard and Supply Co.	5 50		
N. E. Pottery Company	30 15		
Pettingell, Andrews Company	129 06		
Simplex Electric Company	51 34		
Sundry persons	17 93		
U. S. Fire and Police Telephone Co.	5 00		
		1,111 06	
Amounts carried forward		$8,215 13	$10,500 00

ELECTRICAL DEPARTMENT, WIRES — Continued.

Amounts brought forward		$8,215 13	$10,500 00
For Bicycle repairs, J. L. Moseley		11 50	
Binding, J. H. H. McNamee		6 25	
Books, Damrell & Upham		10 30	
Carriage repairs :—			
Middlemas Bros.	$16 70		
Geo. O. Rollins Carriage Company	38 50		
		55 20	
Car tickets, Boston Elevated Railway Company		65 00	
Clocks and repairs :—			
Sundry persons		5 50	
Coppering base of striker in tower, Engine No. 3 :—			
John J. Blevins		10 10	
Expressage :—			
Sawin's Express	$25 94		
Sundry persons	3 10		
		29 04	
Furniture and repairs :—			
Worcester Bros.		27 64	
Hardware, tools and supplies :—			
Brock Bros.	$11 25		
Burditt & Bynner	8 64		
E. T. Bynner	19 27		
Dover Stamping Co.	9 24		
J D. Jewett & Co.	23 43		
Sundry persons	3 63		
A. J. Wilkinson & Co.	9 03		
Jas. H. Wyeth & Co.	16 49		
		100 98	
Harness and repairs, etc :—			
Thomas McMahon	$25 10		
Sundry persons	6 25		
		31 35	
Heating building, "City Building Dept."		100 00	
Horses :—			
P. H. Dardis	$200 00		
C. H. Morse	150 00		
		350 00	
Horse board :—			
Irving Blake	$332 50		
Fire Department	100 00		
Street "	15 00		
		447 50	
Amounts carried forward		$9,465 49	$10,500 00

ELECTRICAL DEPARTMENT, WIRES — Concluded.

Amounts brought forward		$9,465 49	$10,500 00
For horseshoeing, Wm. Balmer		76 00	
Laundry work, F. L. Churchill		20 64	
Lettering signs, Geo. D. Rollins		17 35	
Lighting, Cambridge Elec. Light Co.		45 57	
Lumber, Geo. W. Gale Lumber Co.		8 07	
Moving fire alarm tower :—			
H. S. Angus & Son		50 00	
Oil, lead, etc. :—			
W. J. Edwards	$5 92		
Wadsworth, Howland & Co.	27 35		
		33 27	
Paper, Chas. E. Perry & Co.		61 46	
Repairing tower, Chas. H. Callahan		28 00	
Stationery, printing, etc. :—			
Adams, Cushing & Foster	$6 00		
August Becker Engraving Co.	5 50		
Cambridge Chronicle Co.	19 00		
Carter's Ink Co.	6 00		
Caustic & Claflin	21 50		
Cotton & Gould	8 65		
J. A. Cummings Printing Co.	19 39		
Louis F. Weston	17 50		
Stationery Department	18 92		
Sundry persons	9 36		
Samuel Ward Co.	11 00		
Thorp & Martin Co.	5 32		
		148 14	
Sundries		25 55	
Telephone rent and tolls		424 15	
Travelling expenses :—			
Chas. F. Hopewell		60 26	
Use of horse :—			
Irving Blake	$8 00		
Wm. F. Colby	28 00		
		36 00	
Total			10,499 95
Balance unexpended			05

ENGINEERING DEPARTMENT.

Appropriation		$11,000 00
Transferred to Contingent Fund		200 00
		$10,800 00
RECEIVED.		
For services of engineers	$32 00	
Amount carried forward		$10,800 00

ENGINEERING DEPARTMENT — Concluded.

Amount brought forward			$10,800 00

EXPENDED.

For salaries of :—			
Engineer, L. M. Hastings	$3,000 00		
Assistants	6,477 77		
Clerk, Mary E. Rowen	391 25		
		9,869 02	
Carpentry, W. Fillmore & Co.		12 31	
Carriage hire, sundry persons		5 00	
Car tickets :—			
Boston Elevated Railway Company		225 00	
Directory :—			
Sampson, Murdock & Company		5 00	
Expressage :—			
Sawin's Express	$5 40		
Sundry persons	2 00		
		7 40	
Hardware, tools and repairs, and supplies :—			
D. W. Hyde & Co.	$9 29		
Jas. Maitland	7 40		
F. A. White	20 56		
		37 25	
Instruments and repairs :—			
Sundry persons		8 42	
Oak Case, Shaw & Remby		35 00	
Photographs, blue prints and supplies :—			
Spaulding Print Paper Company	$9 18		
Sundry persons	4 58		
		13 76	
Pipe and labor :—			
Water Works Department		15 47	
Stationery, printing and drawing materials :—			
Cambridge Chronicle Company	$12 50		
Cotton & Gould	9 81		
J. A. Cummings Printing Company	18 66		
S. P. Ferguson	5 00		
Frost & Adams Company	154 07		
E. G. Soltmann	82 65		
Stationery Department	30 85		
Geo. H. Walker & Co.	46 00		
Sundry persons	8 18		
		367 72	
Sundries		13 79	
Telephone rent and tolls		135 50	
Total			10,750 64
Balance unexpended			$49 36

ENGINEERING DEPARTMENT, ASSESSORS' PLANS.

Appropriation		$300 00
EXPENDED.		
For services of engineers	$300 00	
Total		$300 00

EXECUTIVE DEPARTMENT.

Appropriation			$5,400 00
EXPENDED.			
For salaries of : —			
Mayors : —			
Edgar R. Champlin	$291 67		
David T. Dickinson	3,208 33		
Clerk, Edward A. Counihan	1,000 00		
Stenographer, Georgie W. Sanborn	375 17		
Clerical assistance, J. H. Webber	15 00		
		4,875 17	
Carriage hire : —			
J. E. Fabyan	$9 00		
Geo. D. Merrill	13 00		
Ralph Smith & Co.	10 00		
		32 00	
Car tickets : —			
Boston Elevated Railway Company		5 00	
Stationery, printing, etc : —			
Cotton & Gould	$49 35		
J. A. Cummings Printing Co.	35 24		
J. Frank Facey	11 50		
John A. Lowell & Co.	25 67		
Stationery Department	108 21		
		229 97	
Sundries		16 04	
Telephone rent and tolls		114 46	
Travelling expenses, etc : —			
David T. Dickinson and others		106 85	
Total			5,394 49
Balance unexpended			$5 51

FIRE DEPARTMENT.

Appropriation	$94,000 00
Transferred to Contingent Fund	750 00
Amount carried forward	$93,250 00

FIRE DEPARTMENT — Continued.

Amount brought forward			$93,250 00
RECEIVED.			
For board of horse		$100 00	
EXPENDED.			
For salaries of :—			
Chief, Thos. J. Casey	$2,000 00		
Assistant Chief, N. W. Bunker	1,400 00		
Permanent men as per pay rolls	55,597 67		
Call men as per pay rolls	15,127 82		
Pension pay roll :—			
Wm. Parks	516 00		
Edw. E. Priest	516 00		
John H. Robbins	516 00		
Jas. H. Skehan	516 00		
		$76,189 49	
Apparatus and repairs :—			
Abbott, Downing Company	$351 25		
American Locomotive Company	228 50		
Chas. E. Berry	136 25		
Wm. Campbell & Co.	253 39		
Cornelius Callaghan Company	92 75		
Duff Spring Company	14 60		
Wm. Elliot & Co.	58 35		
Manchester Locomotive Works	1,881 21		
Peter McMurray	53 15		
Miller and Shaw	65 05		
Geo. Patterson	11 25		
Scrannage Bros.	27 45		
The Mathieson Alkali Works	30 24		
Chas. Waugh & Co.	118 80		
Sundry persons	5 05		
		3,327 29	
Brooms and combs, F. Pelkey		28 00	
Disinfectants, The Sulpho-Napthol Co.		24 00	
Dues, Gas Consumers Association		9 00	
Expressage and teaming :—			
Bay State Express Company	$5 00		
H. W. Bettinson & Co.	6 25		
Frank F. Duvey	5 00		
Hatch & Co.	9 70		
Savage & Son	7 25		
Sundry persons	3 50		
		36 70	
Fire hats and repairs, capes, etc :—			
E.P. Gleason Manufacturing Company		21 10	
Fuel, Metropolitan Coal Company		1,695 48	
Furniture, furnishings and bedding :—			
D. W. Hyde & Co.	$41 40		
Worcester Bros.	50 40		
		91 80	
Amounts carried forward		$81,422 86	$93,250 00

FIRE DEPARTMENT — Continued.

Amounts brought forward		$81,422 86	$93,250 00
For Hardware, tools and supplies :—			
Brock Bros.	$9 77		
Burditt & Bynner	29 98		
Wm. P. Butterfield	9 00		
E. T. Bynner	216 90		
Casey, Bigley & Co.	35 00		
H. N. Hovey & Co.	9 38		
J. A. Holmes & Co.	12 68		
James H. Wyeth & Co.	5 28		
Sundry persons	11 00		
		338 99	
Harness and repairs :—			
Chas. E. Berry	$39 60		
Owen Doherty	15 85		
Wm. H. Roberts	68 05		
Sundry persons	8 00		
		131 50	
Hay, grain and straw :—			
J. Cushing & Co.	$3,499 52		
E. R. Luke & Co.	369 29		
Geo. G. Wright	146 92		
		4,015 73	
Heating buildings, " City Buildings Dept."		375 00	
Horses, P. H. Dardis		639 00	
Horseshoeing :—			
Wm. Balmer	$44 50		
Wm. Bell	55 00		
D. L. Bolger Horseshoeing Co.	46 00		
P. J. Callahan	72 50		
P. H. Dardis	37 50		
E. E. Donahue	27 50		
W. F. Garrett	100 50		
John F. Gurry & Sons	129 50		
T. Hickey	37 50		
C. M McLeod	40 25		
C. J. McCarthy	30 00		
M. Shaughnessy	19 50		
Bernard Smith	64 75		
Thos. Smith	65 75		
The Jas. Bolger Co.	17 25		
		788 00	
Hose, etc., Boston Woven Hose Co.		678 21	
House repairs :—			
Carpentry :—			
W. H. Norris	$418 15		
John Quin	9 13		
M. F. Tracy & Sons	18 77		
Heating apparatus repaired :—			
Higgins & Co.	25 40		
Pennell & Co.	3 30		
Amounts carried forward	$474 75	$88,389 29	$93,250 00

FIRE DEPARTMENT — Continued.

Amounts brought forward . . .	$474 75	$88,389 29	$93,250 00
For House repairs : —			
Inspection of Boiler, S. C. Baxter .	12 00		
Mason work, Henry McGahey .	257 22		
Painting, glazing, etc. : —			
Cambridge Chronicle Company .	11 50		
J. J. Foley	10 00		
Geo. H. Hughes	10 00		
Plumbing, etc : —			
Brock Bros	8 89		
D J Keefe & Co. . . .	15 60		
Moynahan & Co.	10 45		
H. L. Rose	26 46		
Plaster work, Wm J. Heron . .	165 00		
Roof repairs : —			
John J. Blevins	28 97		
Henry Blevins	7 79		
		1,038 63	
Ice : —			
Cambridge Ice Company . .	$22 40		
Fresh Pond Ice Company . .	23 89		
W. J Kilroy & Co	4 00		
The Independent Ice Company .	6 24		
		56 53	
Insignias, Miss B. Goldsmith . .		16 00	
Laundry work, University City Laundry Company		230 74	
Lighting : —			
Cambridge Electric Light Company	$353 37		
Cambridge Gas Light Company .	454 20		
		807 57	
Lumber, Geo. W. Gale Lumber Company		23 85	
Oil, polish, etc : —			
Cochrane Chemical Company . .	$16 38		
J. Wesley Edmonds . . .	7 65		
Sudbury Oil and Supply Company .	10 50		
Standard Oil Company . . .	54 26		
Nelson P. Trickey	24 00		
		112 79	
Services of veterinary, Mark N. North, M.D.V.		21 00	
Shavings, C. W. H. Moulton & Co.		38 28	
Amounts carried forward		$90,734 68	$93,250 00

FIRE DEPARTMENT — Concluded.

Amounts brought forward		$90,734 68	$93,250 00
For Soap and powder : —			
Standard Chemical Company . .	$17 40		
Chas. R. Teele	14 50		
		31 90	
Stationery and printing, etc. :—			
Cambridge Chronicle Company .	$11 50		
Cotton & Gould	7 00		
J. A Cummings Printing Company	11 46		
Stationery Department . . .	6 28		
		36 24	
Sundries		14 22	
Telephone rent and tolls . . .		104 90	
Use of men and horses :—			
T. A. Callahan	$22 00		
P. H. Dardis	37 00		
Elliott & Duvey	21 00		
Frank F. Duvey	20 00		
Austin Ford & Son	12 00		
Jas. P. McSorley	34 00		
F. McLaughlin	24 00		
Michael Shea	7 00		
Peter Tumilty	9 00		
		186 00	
Weighing, P. J. White . . .		12 10	
Total			91,120 04
Balance unexpended . .			$2,129 96

HEALTH DEPARTMENT.

Appropriation	$19,000 00
Transferred to the Health Department "Temporary Hospital" . .	500 00
	$18,500 00

EXPENDED.

For salaries of :—			
Medical Inspector, Dr. E. Farnham	$3,000 00		
Clerk, Jas. B. Soper . . .	1,200 00		
Secretary, Grace E. Wyeth . .	800 00		
Sanitary Inspectors :—			
John A. Jackson	952 50		
Chas. A. Lincoln	950 00		
Daniel W. Parker	950 00		
Plumber, John McCormick . .	950 00		
Driver, R. M. O'Brien . . .	750 00		
		$9,552 50	
Advertising :—			
Boston Herald Company . .	$8 75		
Post Publishing Company .	5 70		
		14 45	
Amounts carried forward		$9,566 95	$18,500 00

HEALTH DEPARTMENT — Continued.

Amounts brought forward		$9,566 95	$18,500 00
For Ambulance repairs :—			
Chas. Waugh & Co. . . .		45 35	
Bacteriologist, E. A. Darling, M. D.		1,080 00	
Board of sundry persons :—			
Cambridge Hospital . . .	$3,972 90		
Carney Hospital	97 14		
		4,070 04	
Boxes :—			
Wm. H. Norr s	$13 75		
Chas. Place	14 00		
		27 75	
Branding stamps :—			
Mass. Board Cattle Com'rs . .		5 25	
Car tickets :—			
Boston Elevated Railway Company		450 00	
Cases, U. S. Mailing Company . .		5 29	
Cash paid for burying dead animals :—			
Edwin Farnham	$81 75		
M. J. Folsom	10 50		
		92 25	
Clothing, J. A. Jackson . . .		18 00	
Commission as Justice of the Peace :—			
James B. Soper		7 00	
Directories :—			
E. F Hunt & Co.	$3 00		
Sampson, Murdock & Co. . .	5 00		
		8 00	
Drain work, Samuel McCulloch .		39 90	
Expressage :—			
American Express Company . .	$7 40		
Sundry persons	3 95		
		11 35	
Harness and repairs, etc. :—			
W. H. Roberts		16 50	
Heating apparatus, J. Magee . .		23 00	
Horses, Whiting & Prescott . .		49 00	
Horse board and storage :—			
Geo. F. Whiting & Co. . . .	$90 00		
Whiting & Prescott . . .	240 00		
		330 00	
Horseshoeing, W. F. Garrett . .		34 00	
Amounts carried forward		$15,879 63	$18,500 00

HEALTH DEPARTMENT — Concluded.

Amounts brought forward		$15,879 63	$18,500 00
For Medicines, drugs, etc. :—			
J. A. Bird & Co.	$154 73		
Billings & Stover	6 05		
Walter A. Claflin	11 00		
John Toye	12 00		
N. E. Vaccine Company	9 75		
		193 53	
Medical supplies and apparatus :—			
Harvard Co-operative Society	$14 55		
Ernst Leitz	7 50		
Theo Metcalf Company	60 00		
Franklin C Robinson	30 00		
The Ward Apparatus Company	54 38		
Wm. C. Wright	172 50		
		338 93	
Professional services :—			
David D. Brough, M. D.		25 00	
Plumbing, Levi Hawkes		5 56	
School Inspectors :—			
Frank F. Carr	$199 92		
Geo. P. Cogswell	199 92		
Bessie D. Davis	199 92		
A. W. Dudley	33 32		
Chas. M. Hutchinson	166 60		
E. A. McCarthy	99 96		
W. A. Putnam	199 92		
N. V. Shannon	199 92		
		1,299 48	
Serving notices :—			
John F. Kelley	$18 10		
A M. Stewart	6 00		
Walter C. Wardwell	25 96		
		50 06	
Stationery, printing, etc. :—			
Cambridge Chronicle Company	$259 00		
Cotton & Gould	27 38		
J. A Cummings Printing Company	19 97		
Snow & Farnum	5 00		
Stationery Department	13 30		
Sundry persons	5 25		
		329 90	
Sundries		47 22	
Tabulation, Geo. Davis		16 20	
Telephone rent and tolls		177 21	
Tools, hardware and supplies :—			
E. T. Bynner	$10 95		
Sundry persons	7 28		
		18 23	
Wagon repairs, Chas. Waugh & Co.		39 50	
Use of horses, etc :—			
Geo. F. Whiting & Co.	$50 00		
Whiting & Prescott.	29 50		
		79 50	
Total			18,499 95
Balance unexpended			05

HEALTH DEPARTMENT.

TEMPORARY HOSPITAL.

Appropriation		$6,000 00
Transferred from Contingent Fund	$3,989 73	
" " Health Department	500 00	
		4,489 73
		$10,489 73

RECEIVED.

For board and care	$45 72

EXPENDED.

For salaries of :—		
Physician, David C Dow	$1,303 57	
Matron, Mildred Sanborn	1,303 57	
Nurses	3,446 57	
Cooks	308 58	
Houseman, Jas. J. Reagan	730 00	
Laundresses	314 29	
Sundry persons	2 42	
Temporary help	235 02	
		7,644 02
Clothing and dry goods :—		
Jordan, Marsh & Co.		34 32
Expressage and moving furniture :—		
J. R. Hersum & Co.	$19 00	
Sundry persons	2 95	
		21 95
Fuel, Metropolitan Coal Co.		210 08
Furniture, furnishings and household supplies :—		
G. W. Bent & Co.	$149 75	
Jordan, Marsh & Co.	28 01	
Worcester Bros.	13 55	
		191 31
Hardware, tools and supplies :—		
Brock & Eaton	$53 90	
W. J. Edwards	6 30	
Yerxa & Yerxa	29 27	
		89 47
Heating apparatus supplies :—		
Brock & Eaton	$7 70	
Henry N. Clark Co.	24 52	
D. J. Wild & Co.	28 30	
		60 52
House repairs :—		
Carpentry, W. H. Norris		10 75
Ice, Fresh Pond Ice Co.		39 74
Lighting, Cambridge Gas Light Co.		113 90
Amounts carried forward		$8,416 06 $10,489 73

HEALTH DEPARTMENT, TEMPORARY HOSPITAL — Concluded.

Amounts brought forward		$8,416 06	$10,489 73
For Medical apparatus and supplies:—			
Griswoldville Manufacturing Co.	$34 11		
J. A. E. Sellar	80 05		
		114 16	
Medicines and drugs:—			
American Oxygen Association	$16 50		
John Toye	499 25		
		515 75	
Professional services:—			
M. J. Cronin, M. D.	$5 00		
A. W. Dudley, M. D.	20 00		
J. T. G. Nichols, M. D.	5 00		
		30 00	
Subsistence supplies:—			
L. B. Chandler	$279 90		
Robert Elder, Jr.	63 63		
Wm. T. Gibson	278 94		
F. P. Merrill	9 24		
Alex. Millan	7 37		
W. W. Seavey	204 78		
Chas. O. Stickney	164 91		
Yerxa & Yerxa	336 85		
		1,345 62	
Sundries		22 00	
Telephone rent and tolls		46 14	
Total			$10.489 73

HEALTH DEPARTMENT.

LAND FOR TEMPORARY HOSPITAL.

Appropriation	$10,000 00

EXPENDED.

For land and damage—		
Frank J. O'Rielly	$10,000 00	
Total		$10,000 00

INSPECTION OF MILK AND VINEGAR.

Appropriation	$1,700 00

RECEIVED.

For milk licenses	$200 50	

EXPENDED.

For salaries of:—			
Inspector, Philip P. Sharples	$900 00		
Deputy, J. F. Wheeler	420 00		
		1,320 00	
Amounts carried forward		$1,320 00	$1,700 00

INSPECTION OF MILK AND VINEGAR — Concluded.

Amounts brought forward		$1,320 00	$1,700 00
For Car tickets :—			
Boston Elevated Railway Company		45 00	
Cash expended for samples, etc. :—			
P. P. Sharp'es	$11 40		
J. F. Wheeler	8 52		
		19 92	
Chemical apparatus and supplies :—			
Eimer & Amend	$14 25		
R. C Robinson & Co.	47 00		
Whitall, Tatum Company	6 67		
		67 92	
Chemicals and drugs :—			
E. & F. King Company		16 80	
Copper water bath :—			
E. B. Badger & Sons Company		24 40	
Laboratory supplies :—			
Franklin Laboratory Company	$76 08		
Whitall, Tatum Company	6 15		
		82 23	
Numbering machine, Cotton & Gould		8 00	
Stationery, printing, etc :—			
Cambridge Chronicle Company	$61 25		
J. A. Cummings Printing Company	6 41		
Stationery Department	12 87		
		80 53	
Sundries		5 45	
Total			1,670 25
Balance unexpended			$29 75

INSPECTION OF PROVISIONS, ETC.

Appropriation			$800 00
EXPENDED.			
For salary of : —			
Inspector of Provisions :—			
C. E. Hadcock		700 00	
Chemicals, drugs, etc :—			
Walter A. Claflin	$74 25		
A. Cunningham	11 65		
E. H. Patten	9 35		
		95 25	
Sundries		2 20	
Total			797 45
Balance unexpended			$2 55

INTEREST.

Appropriation		$157,414 00
Transferred to Contingent Fund		1,600 00
		$155,814 00
RECEIVED.		
For accrued interest	$1,027 23	
Interest on deposits	2,907 76	
" " sewer assessments	60 90	
" " sidewalk assessments	88 30	
" " taxes	7,620 64	
	$11,704 83	
EXPENDED.		
For Daniel White Charity	$300 00	
Dowse Institute Fund	1,200 00	
Funded loan	144,454 00	
Sanders Temperance Fund	600 00	
Temporary loans	6,759 03	
Total		153,313 03
Balance unexpended		$2,500 97

LAND DAMAGES.

Appropriation			$44,732 91
EXPENDED.			
For Examination of titles :—			
Wm. V. Thompson		$145 65	
Recording deeds		2 05	
Clark Street :—			
Land and damage :—			
Abbie B. Hall		678 20	
Garden and Waterhouse Streets :—			
Land and damage :—			
Chas. F. Choate, Trustee		1,500 00	
Granite Street :—			
Land and damage :—			
Alice M. Briggs	$2,700 00		
Maria M. Nash	1,900 00		
Marie A. Penniman	1,068 00		
Ida A. Sibley	6,000 00		
Leroy A. Whittier	75 00		
		11,743 00	
Inman Street :—			
Land and damage :—			
Henry E. Jones		426 00	
Total			14,494 90
Balance unexpended			$30,238 01

LAW DEPARTMENT.

Appropriation		$5,000 00

RECEIVED.

For services of City Solicitor, Water Works Department	$500 00	

EXPENDED.

For salary of :—			
City Solicitor, G. A. A. Pevey		$3,500 00	
Advertising :—			
Journal Newspaper Company		8 55	
Car tickets :—			
Boston Elevated Railway Company		100 00	
Cash expended for sundries :—			
G. A. A. Pevey		54 83	
Copies of Manuscripts :—			
Middlesex County		37 50	
Desk, Derby Desk Company		19 00	
Directory, Sampson, Murdock & Co.		5 00	
Drawing deed, E. Sidney Berry		5 75	
Estimating value, W. Fillmore & Co.		25 00	
Examination of titles :—			
Augustine J. Daly		10 00	
Map, Geo. H. Walker & Co.		25 00	
Municipal Corporation Cases :—			
The Michie Company		5 00	
Photographs, D. W. Butterfield		46 20	
Professional services :—			
Chas. L. Scudder, M.D.		100 00	
Rent of Boston office :—			
G. A A. Pevey		254 17	
Services, Chas. E. Hadcock		15 00	
Services in Jurada Case, Isaac Damon		5 00	
Serving notices, Walter C. Wardwell		22 20	
Stationery, printing, and typewriter supplies :—			
T. H. Ball	$55 20		
W. C. Miles & Co.	12 50		
Stationery Department	39 05		
		106 75	
Amounts carried forward		$4,344 95	$5,000 00

LAW DEPARTMENT — Concluded.

Amounts brought forward		$4,344 95	$5,000 00
For Subscription : —			
The Banker and Tradesmen Company		5 00	
Sundries		3 74	
Telephone rent and tolls		50 00	
Typewriting and Stenography : —			
Charlotte I. Browne	$50 00		
Viola M. Bryant	20 00		
L. Alberta Felton	16 15		
Avis V. Fowler	88 00		
Geo B. French	358 55		
F. C. Lewis	14 50		
Adolphus Moss	20 00		
		567 20	
X-Ray of foot, Mass. Gen'l Hospital		10 00	
Total			4,980 89
Balance unexpended			$19 11

OVERSEERS OF THE POOR.

CITY HOME.

Appropriation			$21,500 00
Transferred from Contingent Fund			1,200 00
			$22,700 00
Transferred to Contingent Fund			250 00
			$22,450 00
RECEIVED.			
For barrels		$17 05	
Board		793 32	
Grease and bones		53 25	
Sundries		2 72	
Weighing fees		10 58	
		$876 92	
EXPENDED.			
For Salaries of :—			
Superintendent, M. L. Eldridge	$1,500 00		
Assistant Superintendent, S. F. Norris	782 14		
Sundry house employees	5,561 59		
Organist, C. M. Walker	100 00		
		7,943 73	
Advertising and printing :—			
Boston Herald Co.	$7 88		
Cambridge Chronicle Co.	7 00		
		14 88	
Amounts carried forward		$7,958 61	$22,450 00

OVERSEERS OF THE POOR, CITY HOME — Continued.

Amounts brought forward		$7,958 61	$22,450 00
For Board and care at :—			
Carney Hospital	$10 00		
Holy Ghost Hospital	145 71		
Massachusetts General Hospital	45 00		
		200 71	
Boots, shoes and repairs :—			
Massachusetts State Prison	$30 00		
Wm Myers	63 80		
A. G. Swett	57 85		
Sundry persons	5 45		
		157 10	
Burial fees, Cemetery Department		35 00	
Burials :—			
H. D. Litchfield	$68 65		
David J. Nelligan	5 00		
Patrick Noonan	11 15		
Mary A. Sloan	11 15		
		95 95	
Car tickets :—			
Boston Elevated Railway Company.		60 00	
Cash expended, M. L. Eldridge :—			
Cash to inmates	$46 40		
Damage to wagon	5 00		
Expressage	5 00		
Fruit and vegetables	16 76		
Postage	15 00		
Services of clergymen	104 00		
Shrubs and trees	5 00		
Sundries	41 94		
		239 10	
Clothing, dry goods and bedding :—			
Brown, Durrell & Co.	$291 70		
Davies, Payson & Co.	63 50		
Jordan, Marsh & Co.	278 32		
Massachusetts State Prison	95 00		
M. H. Miller	7 00		
L. Morse & Co.	25 00		
John O. Smith Company	29 75		
		790 27	
Curtain for buggy :—			
Geo. R. Henderson		10 00	
Disinfectants :—			
R. S. Downe	$5 00		
India Alkali Works	31 98		
		36 98	
Expressage, Bancroft's Express		23 60	
Fire escapes, Jonas F. Capelle		945 00	
Amounts carried forward		$10,552 32	$22,450 00

OVERSEERS OF THE POOR, CITY HOME — Continued.

Amounts brought forward		$10,552 32	$22,450 00
For Fuel :—			
Bay State Fuel Company	$46 40		
Metropolitan Coal Company	1,441 00		
Weighing, P. J. White	13 25		
		1,500 65	
Furniture, furnishings and household supplies :—			
Alberene Stone Company	$91 40		
French Mitchell Woodbury Co.	6 00		
Greenwood & Co.	23 35		
A. H. Hews & Co.	6 47		
Jordan, Marsh & Co.	48 40		
C. S. Knowles	36 91		
John H. Pray & Sons Company	21 30		
Sundry persons	10 70		
F. A. Walker & Co.	5 55		
Worcester Bros.	18 02		
		268 10	
Gas, Cambridge Gas Light Company		193 90	
Hardware, tools and supplies :—			
Jos. Breck & Sons	$8 25		
Burditt & Bynner	19 71		
E. T. Bynner	84 04		
Sundry persons	10 85		
Walworth Manufacturing Company	75 44		
F. A. White	43 19		
		241 48	
Hay and grain :—			
Clark Bros.	$306 26		
Frost & Foley	42 00		
		348 26	
House repairs :—			
Carpentry, Jos. J. Foley.	$13 75		
Electrical work :—			
Electric Department, wires	27 38		
Electric Gas Light Company	7 21		
Heating apparatus repairs :—			
S. M. Howes & Co.	6 50		
Walker & Pratt Manufacturing Co.	13 74		
Mason work :—			
J. F. Brosnahan	57 52		
Jas. Quinn & Sons	326 17		
Painting, glazing and tinting :—			
J. F. Brosnahan	12 00		
Geo. H. Hughes	13 50		
Plumbing, John H. Stevens & Co.	410 15		
Roof repairs, John J. Blevins	12 29		
Amounts carried forward	$900 21	$13,104 71	$22,450 00

OVERSEERS OF THE POOR, CITY HOME — Continued.

Amounts brought forward . . .	$900 21	$13,104 71	$22,450 00
For House repairs: —			
Windows and repairs: —			
A. W. Hastings & Co. . .	20 92		
Sundry repairs	7 60		
		928 73	
Labor: —			
Wm. Clark	$18 00		
Michael Martin	119 80		
John F. Quinn	50 00		
		187 80	
Lumber, lime and cement: —			
Clark Bros.	$37 10		
John S. Clary	281 29		
Geo. W. Gale Lumber Co. . .	363 84		
		682 23	
Medicines, drugs and chemicals: —			
Gilman Bros.	$8 62		
F. L. Hayden Company . . .	7 50		
Walter H. Keith Sons & Co . .	20 75		
Elie H. La Pierre	171 27		
		208 14	
Medical and surgical apparatus and instruments: —			
Frederick E. Clapp & Co. . .	$13 75		
C. H. Goldthwaite & Co. . .	7 00		
W. H. Phelps & Co. . . .	5 00		
		25 75	
Moving cottage, H. S. Angus & Son .		125 00	
Oils, paints, etc.: —			
W. A. Wood & Co. . . .	$23 04		
Wood Bros.	195 02		
		218 06	
Phones, Couch & Seeley Co. . .		16 50	
Powder, Geo. H. Sampson . .		8 60	
Plants, seeds, etc.: —			
Schlegel & Fottler		48 96	
Professional services: —			
E. H. Stevens, M. D. . . .		10 00	
Rent, Mercantile Wharf Corporation		40 00	
Repairing drain, Sewer Department		11 00	
Repairing clocks, Hersey M'f'g Co.		9 20	
Soap, Standard Chemical Company		112 50	
Stationery, printing, etc: —			
F. W. Barry, Beale & Co. . .	$11 18		
Cotton & Gould	43 85		
		55 03	
Amounts carried forward		$15,792 21	$22,450 00

OVERSEERS OF THE POOR, CITY HOME — Concluded.

Amounts brought forward		$15,792 21	$22,450 00
For Subscriptions: —			
Jas. W. Hunnewell		24 00	
Subsistence supplies: —			
Boston Packing and Provision Co.	$72 26		
Bowman & Vaughan	182 65		
Boyd, Dalton & Co.	86 87		
Henry Callender & Co.	50 65		
Cheney, Upham & Co.	15 75		
Geo. H. Chessman & Co.	29 48		
Cobb, Bates & Yerxa	435 45		
J. P. Dailey	10 00		
Dold Butterine Company	39 00		
Eastern Salt Company	27 90		
R. S. Edwards & Co.	290 43		
David Ellis & Co.	146 71		
N. F. Goldsmith & Co.	6 25		
John Groves & Co.	14 30		
J. A. Hathaway & Co.	1,747 95		
Home Mills Cereal Co.	30 00		
Lyman L. Kimball & Co.	222 05		
W. H. Lerned & Son	79 38		
A. J. Littlefield & Co.	623 20		
Isaac Locke & Co.	22 78		
A. J. Lovell & Co.	92 23		
McPherson Bros.	5 50		
C. E. Moody & Co.	18 45		
National Biscuit Company	44 55		
Fred D. Norton	339 11		
Oakdale Manufacturing Company	225 00		
Old Colony Compressed Yeast Co.	10 64		
A. G. Patch & Co.	6 02		
F. H. Philbrook	20 00		
Puffer Bros.	10 00		
F. Putnam & Co.	206 24		
Geo. E. Richardson & Co.	22 15		
Sands, Taylor & Wood	100 00		
Frederick C. Small & Co.	66 24		
H. W. Spurr & Co.	139 56		
Swan, Newton & Co.	152 62		
Sweeney, Lane & Co.	18 00		
University City Bakery	30 08		
W. T. Warren	13 20		
Wason & Co.	18 22		
David Whiting & Sons	808 82		
Austin Young & Co.	5 28		
		6,484 97	
Sundries		26 96	
Telephone rent and tolls		81 95	
Wagon repairs, Jas. Hickey		24 35	
Total			22,434 44
Balance unexpended			$15 56

OVERSEERS OF THE POOR.

FARM DEPARTMENT.

Appropriation		$5,000 00

RECEIVED.

For farm products	$5,173 83	

EXPENDED.

For labor on farm:—			
Farmer, Jas. Walsh	$782 50		
Market-man, John Moynahan	105 00		
Employees	3,344 40		
		4,231 90	
Boxes, M. J. Gallagher & Co.		5 40	
Hardware, tools, etc.:—			
Jos. Breck & Sons		12 32	
Hay, grain, etc., Clark Bros.		195 29	
Labor, John Kenney		110 00	
Lathyarn:—			
The Lincoln-Dallaway Company		5 61	
Lumber, Geo. W. Gale Lumber Co.		40 37	
Manure:—			
T. A. Callaghan	$9 94		
C. Mulcahey	11 72		
Sundry persons	5 66		
		27 32	
Pigs:—			
Cutter Bros.	$54 00		
W. K. Hutchinson	38 00		
W. W. Rawson	40 00		
Daniel L. Tappan	60 00		
T. G. Whiting	31 50		
		223 50	
Plants, seeds, etc:—			
Johnson & Stokes	$15 75		
C. F. Penney	30 00		
Schlegel & Fottler	77 54		
Sundry persons	9 55		
		132 84	
Putty, Wood Bros.		5 75	
Sundries		2 61	
Total			4,992 91
Balance unexpended			$7 09

OVERSEERS OF THE POOR.

HOUSE OFFAL DEPARTMENT.

Appropriation		$26,000 00
Transferred from Contingent Fund		1,615 49
		$27,615 49

RECEIVED.

For sale of house offal	$8,016 71	

EXPENDED.

For labor as per pay roll		22,806 39	
Disinfectants :—			
C. W. Lerned & Co.	$23 88		
Sulpho-Napthol Co.	20 00		
		43 88	
Hardware, tools and repairs :—			
Dodge, Haley & Co.		22 35	
Harness and repairs, etc. :—			
Jos. A. Ryan	$148 70		
Sartwell, Heinhold & Humphrey	15 00		
		163 70	
Hay, grain, straw, etc. :—			
Clark Bros.	$1,593 51		
J. Cushing & Co.	543 86		
Hosmer, Robinson & Co.	37 19		
W. S. Leavitt & Co.	593 78		
Lord & Webster	84 16		
L. G. Stone	22 50		
Tucker, Sanborn & Co.	130 75		
		3,005 75	
Horses, Welch & Hall Co.		580 00	
Horseshoeing :—			
Wm. Bell	$198 25		
E. B. Griffin	71 95		
John McMahon & Co.	39 48		
Street Department	107 70		
		417 38	
Labor, Hugh Toomey		120 00	
Lumber, Geo. W. Gale Lumber Co.		64 41	
Oil, paints, etc. :—			
Sudbury Oil & Supply Co.	$5 75		
Wood Bros.	60 50		
		66 25	
Sundries		8 49	
Amounts carried forward		$27,298 60	$27,615 49

OVERSEERS OF THE POOR, HOUSE OFFAL DEPT. — Concluded.

Amounts brought forward		$27,298 60	$27,615 49
For Wagon repairs:—			
J. E. Fitzgerald	$85 80		
James Hickey	194 25		
		280 05	
Wiring and fitting lamps:—			
F. Bryant & Co.		36 84	
Total			$27,615 49

OVERSEERS OF THE POOR.

OUTSIDE AID DEPARTMENT.

Appropriation	$52,000 00
Transferred to Contingent Fund	1,900 00
	$50,100 00

RECEIVED.

For aid to, board and burial of sundry paupers		$4,076 88

EXPENDED.

For salaries of : —			
Secretary, D. P. Muzzey	$1,500 00		
Visitor, V. Danforth	481 66		
Agent, H. K. Estabrook	1,200 00		
Driver, John Moynahan	257 50		
Driver M. J. O'Reagan	84 00		
Clerk : —			
Addie M. Benson	626 00		
		4,149 16	
Aid to sundry persons as per pay roll		843 00	
By cities and towns : —			
City of Beverly	$74 28		
City of Boston	1,736 76		
City of Chelsea	101 50		
City of Everett	257 89		
City of Fall River	5 50		
City of Fitchburg	51 00		
City of Haverhill	93 60		
City of Lowell	18 75		
City of Malden	269 14		
City of Newton	47 30		
City of Somerville	835 42		
City of Worcester	15 72		
Town of Athol	78 00		
Town of Belmont	364 61		
Town of Bolton	27 85		
Town of Brookline	153 65		
Town of Cohasset	67 60		
Town of Danvers	39 00		
Town of Hudson	44 50		
Town of Revere	119 45		
Town of Winchester	61 42		
		4,462 94	
Amounts carried forward		$9,455 10	$50,100 00

OVERSEERS OF THE POOR, OUTSIDE AID DEPARTMENT — Continued.

Amounts brought forward		$9,455 10	$50,100 00
For Ambulance Fees, Police Department		150 00	
Binding :—			
J. H. H. McNamee	179 75		
E. W. Bettinson	6 00		
		185 75	
Board and care by Commonwealth of Massachusetts at :—			
Danvers' Insane Hospital	$236 79		
Hospital for Dipsomaniacs	497 86		
Hospital for Epileptics	663 94		
Mass. School for Feeble-minded	1,384 04		
Medfield Insane Asylum	7 60		
State Farm, Insane	364 00		
State Farm, Pauper	44 58		
State Hospital, Insane	834 40		
State Hospital, Pauper	1,152 15		
Taunton Insane Hospital	85 89		
Westboro Insane Hospital	289 25		
Worcester Insane Hospital	1,003 78		
		6,564 28	
Board and care at :—			
Boston Children's Aid Society	$337 11		
Cambridge Hospital	232 17		
Carney Hospital	388 86		
Mrs. Albert C. Crane's	146 00		
Danvers Insane Hospital	1,568 37		
Bessie A. Dinsmore's	146 00		
Chester D. Holmes'	68 85		
Hospital Cottages for Children	226 72		
Massachusetts General Hospital	68 00		
Mass. Homeopathic Hospital	21 43		
Mass. Hospital for Dipsomaniacs	967 78		
Mass. Hospital for Epileptics	937 53		
Mass. School for Feeble-minded	2,287 87		
Medfield Insane Asylum	5,743 68		
Northampton Insane Hospital	169 46		
Thos. F. Smith's	169 46		
Mrs. Geo. H. Sweet's	169 46		
Taunton Insane Hospital	213 17		
The Children's Hospital	47 00		
The Convalescent Home	18 00		
Westboro Insane Hospital	2,470 35		
Worcester Insane Asylum	3,027 14		
Worcester Insane Hospital	12,209 24		
		31,633 65	
Burial fees, Cemetery Department		138 00	
Burials, H. D. Litchfield		134 05	
Carpentry, W. H. Norris		5 50	
Carriage hire :—			
M. J. Fairbanks	$19 50		
Sundry persons	18 00		
		37 50	
Amounts carried forward		$48,303 83	$50,100 00

OVERSEERS OF THE POOR, OUTSIDE AID DEPARTMENT — Continued.

Amounts brought forward		$48,303 83	$50,100 00
For Car tickets :—			
Boston Elevated Railway Company	$320 00		
Boston & Maine Railroad	51 75		
		371 75	
Cash expended :—			
L. L. Bryant, M. D.	$9 41		
H. K. Estabrook	31 68		
		41 09	
Conveying child to Hospital :—			
L. L. Bryant, M. D.		8 69	
Directories : —			
W. A. Greenough & Co.	$53 50		
Albert C. Lynn	6 00		
Henry M. Meek Publishing Co.	5 30		
Otis Merriam	7 50		
Sampson, Murdock & Co.	5 00		
W. E. Shaw	11 50		
		88 80	
Floral emblem, J. Newman & Sons		10 00	
Ice, Fresh Pond Ice Company		20 80	
Lighting :—			
Cambridge Electric Light Company	$17 05		
Cambridge Gas Light Co.	11 10		
		28 15	
Medical and surgical apparatus and instruments and supplies :—			
Codman & Shurtleff.	$6 00		
Harvard Co-operative Society	12 75		
Peake Manufacturing Company	5 50		
		24 25	
Medicines, drugs, etc. :—			
G. D. Brown & Co.	$12 15		
C. E. Combs	5 71		
Wm. H. Frasier	6 84		
Elie H. La Pierre	86 44		
A. D Reycroft	6 65		
L. W. Reycroft	18 23		
Sundry persons	9 49		
		145 51	
Paper, Wm. H. Claflin & Co.		8 10	
Professional services :—			
J. T. G. Nichols, M. D.	$10 00		
Edwin W. Rich, M. D.	8 00		
Roswell Wetherbee, M. D.	88 00		
		106 00	
Services as attendant :—			
John T. Cook	$12 00		
Warren H. Dow	14 00		
Warren Ivers	10 00		
John McCauley	16 00		
Geo. E. Sherman	8 00		
Sundry persons	6 00		
		66 00	
Amounts carried forward		$49,222 97	$50,100 00

OVERSEERS OF THE POOR, OUTSIDE AID DEPARTMENT — Concluded.

Amounts brought forward		$49,222 97	$50,100 00
For Services, Frank McGowan		5 00	
Shellacing, Geo. H. Hughes		29 75	
Stationery, printing & typewriting supplies :—			
F. W. Barry, Beale & Co.	$21 80		
Cotton & Gould	184 30		
J. A. Cummings Printing Company	82 02		
Sundry persons	6 10		
		294 22	
Subsistence supplies :—			
Theodore E. Blake	$7 00		
Boston Packing & Provision Co.	19 75		
Boyd, Dalton & Co.	64 51		
Edgeworth & Tutein	112 50		
R. S. Edwards & Co.	20 83		
John Groves & Co.	14 40		
McPherson Bros.	9 00		
Fred'k C. Small & Co.	64 53		
H. W. Spurr & Co.	12 00		
Sundry persons	5 37		
		329 89	
Sundries		37 25	
Telephone rent and tolls		151 75	
Travelling expenses :—			
Francis A. Smith, Agent of Associated Charities		16 00	
Total			50,086 83
Balance unexpended			$13 17

OVERSEERS OF THE POOR.

SALARY OF CITY PHYSICIAN.

Appropriation	$1,500 00

EXPENDED.

For Salary of City Physician :—	
Dr. Lewis L. Bryant	$1,500 00

PARK DEPARTMENT.

CONSTRUCTION.

Appropriation			$142,593 18
RECEIVED.			
For old buildings		$237 00	
Rent		1,242 60	
Shrubs		60	
		$1,480 20	
EXPENDED.			
For Cambridge Field :—			
Salary of janitor	113 15		
Filling, sundry persons	548 06		
Hardware, tools and supplies :—			
James Maitland	9 21		
Lumber, E. D. Sawyer & Co.	78 79		
Pay-rolls :—			
Engineers $157 49			
Laborers 1,113 52			
	1,271 01		
Stakes, John Quin	29 05		
Sundries	4 10		
Teaming	228 18		
Total expenses, Cambridge Field		2,281 55	
East Cambridge Embankment :—			
Pay-rolls :—			
Laborers $736 25			
Engineers 3 37			
	$739 62		
Total expenses, East Cambridge Embankment		739 62	
For General Account :—			
Salary of General Superintendent of Parks :—			
Howard E. Whiting	$2,000 00		
Bicycle repairs, J. L. Moseley	6 63		
Carriage hire :—			
Geo. F. Whiting & Co. $6 00			
Whiting & Prescott 28 00			
	34 00		
Carriage repairs, F. Ivers & Son	22 50		
Amounts carried forward	$2,063 13	$3,021 17	$142,593 18

PARK DEPARTMENT, CONSTRUCTION — Continued.

Amounts brought forward		$2,063 13	$3,021 17	$142,593 18
For General Account:—				
Car tickets:—				
Boston Elevated Railway Company		275 00		
Dinners, Riverbank Court		35 80		
Expressage, Sundry persons		4 95		
Hardware, tools and repairs, and supplies:—				
Joseph Breck & Sons	$35 34			
E. T. Bynner	23 43			
F. A. White	6 55			
		65 32		
Harness repairs, etc.:—				
Whiting & Prescott		26 50		
Heliotypes, Heliotype Printing Company		131 25		
Horse board:—				
Geo. F. Whiting & Co.	$75 00			
Whiting & Prescott	175 00			
		250 00		
Horseshoeing, W. F. Garrett		27 00		
Landscape architects, Olmsted Bros.		401 47		
Photograph supplies:—				
Whitney & Son	$18 20			
Sundry persons	8 69			
		26 89		
Rent, The Prospect Union		130 00		
Rubber boots:—				
C. J. Bailey & Co.	$18 60			
Franklin Rubber Co.	14 00			
		32 60		
Seeds, Joseph Breck & Sons		65 60		
Stationery, printing, etc.:—				
Cotton & Gould	$7 75			
J. A. Cummings Printing Co.	58 20			
Sundry persons	5 95			
		71 90		
Stenography, Misses Sargent and Cox		6 25		
Sundries		1 95		
Total for General Account			3,615 61	
Amounts carried forward			$6,636 78	$142,593 18

PARK DEPARTMENT, CONSTRUCTION — Continued.

Amounts brought forward		$6,636 78	$142,593 18
For Hastings Square :—			
Edgestones, S. & R. J. Lombard	$271 90		
Filling, Sundry persons	81 03		
Labor and supplies :—			
Water Works Department	15 70		
Pay rolls :—			
Engineers $96 69			
Laborers 903 51			
	1,000 20		
Pipe, D. W. Lewis	12 26		
Removing fence, John F. Elkins	99 00		
Shrubs, Shady Hill Nursery Company	125 70		
Sundries	2 98		
Teaming	130 69		
Total expenses, Hastings Square		1,739 46	
The Nursery :—			
Freight, Boston & Maine Railroad	$45 41		
Hardware and supplies :—			
Sundry persons	7 77		
Pay rolls, laborers	717 33		
Sundries	7 82		
Trees and shrubs :—			
Frederick W. Kelsey 110 45			
Shady Hill Nursery 99 00			
	209 45		
Total expenses, The Nursery		987 78	
The Office :—			
Salaries of :—			
Clerk, Grace E. Hixon $626 00			
Temporary Clerk, S. E. Ward 21 50			
	$647 50		
Books on Horticulture :—			
C. E. Lauriat Company	8 00		
Card Index case, The Fred Macey Co.	19 74		
Stationery, printing and Typewriting supplies :—			
Cambridge Chronicle Co. $79 50			
Cotton & Gould 44 36			
Stationery Department 55 75			
	179 61		
Sundries	5 83		
Telephone rent and tolls	112 10		
Total expenses, The Office		972 78	
Amounts carried forward		$10,336 80	$142,593 18

PARK DEPARTMENT, CONSTRUCTION — Continued.

Amounts brought forward		$10,336 80	$142,593 18
For Porters Square :—			
Engineers	10 50		
Total expenses, Porters' Square		10 50	
Rindge Fieid : —			
Pay Rolls : —			
Engineers $11 50			
Laborers 27 67			
	$39 17		
Sundries	8 08		
Total expenses, Rindge Field		47 25	
River Parkway, Section A : —			
Lighting : —			
Welsbach Street Lighting Company	420 84		
Pay rolls, Laborers	53 00		
Total expenses, Section A.		473 84	
River Parkway, Section B : —			
Charges of suit of J. T. Scully : —			
John H. Hurley	$11 72		
Fence, A. B. Robbins	40 30		
Hose, Alex. S. Ford	6 00		
Lighting : —			
Welsbach Street Lighting Company	1,209 09		
Pay-rolls : —			
Engineers $60 15			
Laborers 2,368 01			
	2,428 16		
Poles, Coleman Bros.	26 00		
Sundries	12 10		
Teaming	76 31		
Trees and shrubs : —			
Fred'k W. Kelsey $16 45			
Shady Hill Nursery Company 108 86			
	125 31		
Wood ashes, J. P. Squire & Co.	19 84		
Total expenses, Section B.		3,954 83	
River Parkway, Section C : —			
Advertising and printing : —			
Cambridge Chronicle Co. $11 25			
Sundry persons 2 16			
	$13 41		
Bolts, Sylvester & Co.	112 35		
Bulkhead, Jos. Ross	11,066 26		
Examining title, Wm. V. Thompson	5 00		
Amounts carried forward	$11,197 02	$14,823 22	$142,593 18

PARK DEPARTMENT, CONSTRUCTION — Continued.

Amounts brought forward . . .	$11,197 02	$14,823 22	$142,593 18
For Filling:—			
N. E. Dredging Co. . $30,450 55			
Sundry persons . . 1,269 51			
	31,720 06		
Fuel, John E. Cousens & Co. . .	8 00		
Hardware, tools and repairs, and supplies: —			
E. T. Bynner . . . $25 48			
Sundry persons . . 3 48			
	28 96		
Labor and materials: —			
Water Works Department . .	9 25		
Lumber: —			
C. E. Dearborn . . $294 18			
M. Elston & Son . . 58 62			
Geo. W. Gale Lumber Company . . . 18 76			
John Quin . . . 12 09			
	383 65		
Norcross Bros. Case: —			
John C. Cobb, expert examinations, etc. . $200 00			
Watson G. Cutter & Sons 100 00			
Richard H. Dana . . 50 00			
C. W. Henderson . . 25 00			
James M. Hilton, expert witness . . . 50 00			
G. L. Huntress, Arthur Lord, and Wm. H. Sayward, Com'rs, Services 813 75			
L. Foster Morse . . 200 00			
J. L. Nason & Co., Appraising damage, etc. . 200 00			
Frederick L. Viaux, services 200 00			
	1,838 75		
Pay-rolls: —			
Engineers . . .$1,050 66			
Laborers 593 51			
	1,644 17		
Piles: —			
Holbrook, Cabot & Daly $708 60			
W. A. Norton . . 297 68			
	1,006 28		
Plank, Street Department . .	18 00		
Rent of scow and labor, Jos. Ross .	379 87		
Sundries	6 95		
Towing: —			
Steam Tug boats, I. F. Ross and owners . $20 00			
W. G. Williams and owners . . . 20 00			
	40 00		
Total expenses, Section C. . . .		48,280 96	
Amounts carried forward . . .		$63,104 18	$142,593 18

PARK DEPARTMENT, CONSTRUCTION — Continued.

Amounts brought forward		$63,104 18	$142,593 18
River Parkway, Section D :—			
For Building locker house, David F. Burns	1,056 23		
Filling, Sundry persons	822 27		
Frame and grate :—			
Barbour, Stockwell Company	5 00		
Fuel, Coleman Bros.	5 69		
Hardware, tools and supplies :—			
E. T. Bynner	10 53		
Iron works, Miller & Shaw	9 02		
Labor and materials, etc. :—			
Water Works Department	7 33		
Lighting :—			
Welsbach Street Lighting Company	687 97		
Lumber :—			
E. D. Sawyer & Co. $6 96			
Wm. H. Wood & Co. 56 94			
	63 90		
Pay rolls :—			
Engineers $145 24			
Laborers 2,862 84			
	3,008 08		
Piles, John T. Scully & Bro.	24 50		
Pipe, D. W. Lewis	46 30		
Plans, etc., Geo. A. Moore	95 00		
Sand and gravel, Thos. O'Hara	12 00		
Seats, David F. Burns	27 00		
Signs, Cambridge Sign Company	23 75		
Stakes, John Quin	68 25		
Sundries	9 19		
Teaming, sundry persons	33 38		
Trees and shrubs :—			
Fred'k W. Kelsey $13 55			
Shady Hill Nursery Co. 38 99			
	52 54		
Use of engine, Geo. E. Worthen	12 00		
Total expenses, Section D.		6,079 93	
River Parkway, Section E :—			
Examining title, Wm. V. Thompson	$85 00		
Land and damage :—			
Cambridge Electric Light Cmpany $25,000 00			
Henry O. Houghton, *et al* 35,000 00			
	60,000 00		
Amounts carried forward		$69,184 11	$142,593 18

PARK DEPARTMENT, CONSTRUCTION — Continued

Amounts brought forward . . .			$69,184 11	$142,593 18
For Pay rolls :—				
Engineers . . .	$414 12			
Laborers . . .	36 00			
		450 12		
Sundries		2 15		
Total expenses, Section E . . .			60,537 27	
River Parkway, Section F :—				
Advertising and printing . . .		12 12		
Filling, sundry persons . . .		407 56		
Lighting :—				
Welsbach Street Lighting Co. .		62 28		
Lumber, E. D. Sawyer & Co. . .		27 38		
Pay rolls :—				
Engineers . . .	$320 63			
Laborers . . .	3,364 13			
		3,684 76		
Removing stone :—				
Augustus Bellevue & Co. . .		815 63		
Sundry persons		7 08		
Teaming, sundry persons . . .		695 06		
Tools, hardware and supplies :—				
Jos. Breck & Sons		15 25		
Total expenses, Section F . . .			5,727 12	
For River Parkway, Section H :—				
Filling, Sundry persons . . .		$100 50		
Labor and materials :—				
Water Works Department . .		104 40		
Pay-rolls :—				
Engineers . . .	$54 75			
Laborers	514 99			
		569 74		
Sundries		7 15		
Trees and Shrubs :—				
Shady Hill Nursery Company . .		40 00		
Total expenses, Section H. . . .			821 79	
Total				136,270 29
Balance unexpended . . .				$6,322 89

PARK DEPARTMENT, CONSTRUCTION — Concluded.

SUMMARY — EXPENDED.

For Cambridge Field	$2,281 55	
East Cambridge Embankment	739 62	
General Account	3,615 61	
Hastings Square	1,739 46	
The Nursery	987 78	
The Office	972 78	
Porter's Square	10 50	
Rindge Field	47 25	
River Parkway, Section A	473 84	
" " " B	3,954 83	
" " " C	48,280 96	
" " " D	6,079 93	
" " " E	60,537 27	
" " " F	5,727 12	
" " " H	821 79	
Total		$136,270 29

PARK DEPARTMENT, MAINTENANCE.

Appropriation	$21,500 00
Revenue appropriation	277 61
Transferred from Contingent Fund	2,050 00
	$23,827 61

RECEIVED.

From bath house	$1,705 32
Chopping blocks	6 50
Labor	63 74
Sundries	2 05
	$1,777 61

EXPENDED.

For bath houses: —		
Bathing raft, J. P. Lynch	$20 00	
Bathing suits, towels, etc.—		
J. H. Corcoran & Co.	112 20	
Boat, Richard Jope	46 69	
Canvas cover:—		
Henry A. Wheeler & Co.	23 50	
Cash register, High & Hoyt	21 40	
Electric work, Inspection of wires	9 40	
Flag pole, L. W. Ferdinand & Co.	17 50	
Laundry work, Monk's Laundry	302 05	
Lighting:—		
Cambridge Electric Light Company	143 83	
Lumber for bathing raft:—		
E. D. Sawyer & Co.	20 62	
Amounts carried forward	$717 19	$23,827 61

PARK DEPARTMENT, MAINTENANCE — Continued.

Amounts brought forward . . .		$717 19		$23,827 61
For Pay-rolls, Laborers . . .		1,497 31		
Printing, Cambridge Chronicle Co. .		22 50		
Sundries		13 85		
Supplies, hardware, etc. :—				
E. T. Bynner . . .	$47 62			
J. H. Corcoran & Co. .	28 70			
J. A. Holmes & Co. .	5 65			
J. D. Jewett & Co. .	29 80			
		111 77		
Telephone rent		7 70		
Total Expenses, Bath Houses . .			$2,370 32	
For Cambridge Field :—				
Carpentry, W. Fillmore & Co. . .		$23 94		
Clothing, Cap and trimmings :—				
Oak Hall Clothing Company . .		39 96		
Hardware, tools, repairs and supplies :—				
Jas. Maitland . . .	$6 60			
Sundry persons . .	2 88			
		9 48		
Labor and materials :—				
Water Works Department . .		7 67		
Lighting :—				
Cambridge Electric Light Company		1,074 99		
Paint, oil, etc., Ralph C. Hoagland .		15 95		
Pay-rolls :—				
Engineers . . .	$8 75			
Laborers . . .	2,388 34			
		2,397 09		
Sundries		8 33		
Teaming, sundry persons . . .		16 69		
Trees and shrubs :—				
Shady Hill Nursery Company .		5 21		
Wood ashes, J. P. Squire & Co. .		36 61		
Total expenses, Cambridge Field . .			3,635 92	
For Cambridge Field Shelter :—				
Superintendent :—				
Frederick Gustinger .	$169 71			
Superintendent, John Good	408 85			
Janitor, G. J. Weber . .	776 00			
Matron, Mrs. E. Reardon .	521 43			
		$1,875 99		
Amounts carried forward .		$1,875 99	$6,006 24	$23,827 61

PARK DEPARTMENT, MAINTENANCE — Continued.

Amounts brought forward . . .	$1,875 99	$6,006 24	$23,827 61
Clothing, Oak Hall Clothing Co. .	27 17		
Fuel, Metropolitan Coal Co. . .	102 25		
Hardware, tools and supplies :—			
E. T. Bynner . . . $7 15			
Wm. H. Claflin & Co. . 25 50			
Sundry persons . . 5 35			
	38 00		
Laundry work, E. & R. Laundry .	15 45		
Lighting :—			
Cambridge Electric Light Company	62 12		
Painting and varnishing, J. L. P. Ackers	290 00		
Sundries	65		
Telephone rent and tolls . . .	62 85		
Total for Cambridge Field Shelter .		2,474 48	
For Commons and Squares :—			
Axle for cannon, W. Fillimore & Co.	$9 00		
Expressage, sundry persons . .	4 60		
Fuel, Richardson & Bacon . . .	6 80		
Hardware, tools and supplies :—			
Joseph Breck & Sons . $13 19			
Burditt & Bynner . . 8 09			
E. T. Bynner . . . 5 62			
	26 90		
Insurance, T. H. Raymond . .	10 00		
Lighting :—			
Cambridge Electric Light Company	420 00		
Lumber, E. D. Sawyer & Co. . .	56 29		
Paint, varnish, oil, etc. :—			
Ralph P. Hoagland . . .	51 87		
Pay-rolls :—			
Engineers . . . $2 00			
Laborers 2,546 00			
	2,548 00		
Plants, Jos. Breck & Sons . . .	107 10		
Repairing flags, F. E. Blaisdell . .	9 50		
Slats for settees, Jos. Breck & Sons .	7 00		
Sundries	12 98		
Teaming, sundry persons . . .	135 13		
Work on flag staff :—			
J. Johansen. . . $27 77			
M. J. Connelly . . 19 50			
	47 27		
Total expenses, Commons and Squares		3,452 44	
Amounts carried forward		$11,933 16	$23,827 61

PARK DEPARTMENT, MAINTENANCE — Continued.

Amounts brought forward		$11,933 16	$23,827 61
For General Account:—			
Bicycle repairs, J. L. Moseley	$22 35		
Clearing snow off Artificial Pond:—			
Boston Packing & Provision Co.	25 00		
Expressage, Hatch & Co.	7 55		
Hardware, tools and supplies:—			
Joseph Breck & Sons $172 92			
E. T. Bynner 35 12			
Sundry persons 2 20			
	210 24		
Harness repairs, Hugh McCaffrey	55 85		
Heating apparatus repairs:—			
Higgins & Co.	16 54		
Horse board, Street Department	260 00		
Horseshoeing, Street Department	11 20		
Lumber, E. D. Sawyer & Co.	73 33		
Oil, E. S. Thayer & Co.	8 50		
Printing, Cambridge Chronicle Co.	11 00		
Sundries	1 75		
Wagon repairs, Chas. Waugh & Co.	32 75		
Total expenses, General Account		736 06	
For Public Grounds:—			
Fillings, sundry persons	$220 43		
Lumber, E. D. Sawyer & Co.	11 27		
Manure, Thos. O'Hara	6 50		
Pay-rolls			
Engineers $100 61			
Laborers 1,534 77			
	1,635 38		
Stakes, John Quin	9 50		
Sundries	35		
Teaming, sundry persons	13 50		
Trees, shrubs and plants:—			
Joseph Breck & Sons $17 65			
P. O'Brien & Son 70 00			
Shady Hill Nursery Company 68 80			
	156 45		
Total expenses, Public Grounds		2,053 38	
Amounts carried forward		$14,722 60	$23,827 61

PARK DEPARTMENT, MAINTENANCE — Continued.

Amounts brought forward		$14,722 60	$23,827 61
For Rindge Field :—			
Lighting :—			
Cambridge Electric Light Company . . .	$216 70		
Welsbach Street Lighting Company . . .	57 09		
		$273 79	
Slats for settees, Jos. Breck & Sons		8 70	
Sundries		32	
Total expenses, Rindge Field . .			282 81
For Shade Trees :—			
Care of trees, Geo. W. McKee . .		$8 60	
Filling, sundry persons . . .		68 16	
Hardware, tools and repairs, and supplies :—			
Jos. Breck & Sons . .	$261 38		
E. T. Bynner . . .	38 29		
Daniel J. Sullivan . .	23 10		
Sundry persons . .	7 93		
		330 70	
Hose, Alex. S. Ford . .		8 11	
Loam, Jeremiah Sullivan . . .		101 70	
Pay-rolls :—			
Engineers . . .	$40 25		
Laborers . . .	4,111 03		
		4,151 28	
Poles :—			
E. W. Farrell . . .	$93 78		
E. D. Sawyer & Co. .	13 50		
		107 28	
Printing :—			
Cambridge Chronicle Company .		12 00	
Sundries		13 35	
Teaming, sundry persons . . .		225 69	
Total expenses, Shade Trees . .			5,026 87
For River Parkway, Section G :—			
Filling, sundry persons . . .		$10 58	
Hardware, tools and repairs, and supplies :—			
William Elliott & Co. .	$9 40		
Sundry persons . .	4 55		
		13 95	
Lighting :—			
Welsbach Street Lighting Company		845 34	
Lumber, E. D. Sawyer & Co. . .		8 40	
Paints, oils, etc., Ralph P. Hoagland .		10 60	
Amounts carried forward .		$888 87	$20,032 28 $23,827 61

PARK DEPARTMENT, MAINTENANCE — Concluded.

Amounts brought forward . . .		$888 87	$20,032 28	$23,827 61
For Pay-rolls :—				
Engineers . . .	$160 00			
Laborers	2,607 02			
		2,767 02		
Repairing iron fence, A. Simpson .		6 50		
Slats for lawn seats :—				
Joseph Breck & Sons . . .		6 00		
Sundries		5 18		
Teaming, sundry persons . . .		14 90		
Trees and shrubs :—				
Shady Hill Nursery Company .		5 27		
Wood ashes, J. P. Squire & Co. .		19 42		
Total expenses, Section G . . .			3,713 16	

SUMMARY-EXPENDED.

For Bath Houses	$2,370 32	
Cambridge Field	3,635 92	
" " Shelter . . .	2,474 48	
Commons and Squares . . .	3,452 44	
General Account	736 06	
Public Grounds	2,053 38	
Rindge Field	282 81	
Shade trees	5,026 87	
River Parkway, Section G . . .	3,713 16	
Total		23,745 44
Balance unexpended . .		$82 17

PARK DEPARTMENT.

MAINTENANCE, INTEREST.

Appropriation	$46,040 00

EXPENDED.

For funded loan	$44,880 00	
Total		44,880 00
Balance unexpended . .		$1,160 00

PARK DEPARTMENT.

SINKING FUNDS.

Appropriation		$21,208 33
EXPENDED.		
For amount required by City ordinance for payment of park debt.	21,208 33	
Total		$21,208 33

PLUMBERS EXAMINERS DEPARTMENT.

Appropriation		$150 00
RECEIVED.		
For licenses	$49 50	
EXPENDED.		
For examinations, John Crawford	115 00	
Total		115 00
Balance unexpended		$35 00

POLICE DEPARTMENT.

Appropriation			$124,000 00
Transferred from Contingent Fund			14,458 58
			$128,458 58
RECEIVED.			
For ambulance fees	$165 00		
Cloth	582 84		
Exchange of horses	100 00		
Fines :—			
J. R. Fairbairn, House of Correction	766 00		
E. W. Law, Third District Court	4,460 25		
Junk	5 61		
		$6,079 70	
EXPENDED.			
For salaries of :—			
Chief, L. J. Cloyes	$2,000 00		
Deputy Chief, W. F. Batchelder	1,500 00		
Amounts carried forward	$3,500 00		$128,458 58

POLICE DEPARTMENT — Continued.

Amounts brought forward			$128,458 58
For salaries of :—			
Captains :—			
M. J. Folsom	1,400 00		
J. F. Murray	1,400 00		
F. B. Pullen	1,400 00		
Inspector, J. E Murray	1,400 00		
Lieutenant, Henry C. Jones	1,200 85		
Sergeants	7,114 25		
Patrolmen	88,751 56		
Reserve Officers	9,832 86		
Drivers	5,435 00		
Matrons	730 00		
		122,164 52	
Belts, billies, straps, etc :—			
Raphael Masstrangialo		126 20	
Bicycle repairs, E. H. McDuffee		13 60	
Buttons, D. Evans & Co.		30 00	
Car tickets :—			
Boston Elevated Railway Company		350 00	
Cash expended for sundries :—			
Jas. A. Cox	9 00		
M. J. Folson	7 00		
J. E. Murray	18 80		
J. F. Murray	13 95		
F. B. Pullen	6 96		
Sundry persons	6 75		
		62 46	
Cleaning stations :—			
Julia Delaney	$19 50		
Mary McEachern	96 00		
Anna Wright	120 00		
		235 50	
Cloth for uniforms :—			
Thos. W. Talcott	$534 35		
Wendell, Fay & Co.	30 00		
		564 35	
Directories :—			
W. A. Greenough & Co.	$3 00		
E. F. Hunt & Co.	15 00		
Sampson, Murdock & Co.	5 00		
		23 00	
Disinfectants :—			
R. S. Downe	$5 00		
Puritan Germicide Company	22 50		
Sulpho-Napthol Company	5 00		
		32 50	
Dues, Gas Consumers' Association		36 00	
Fire arms and repairs :—			
Wm. Read & Sons		108 70	
Amounts carried forward		$123,746 83	$128,458 58

POLICE DEPARTMENT — Continued.

Amounts brought forward		$123,746 83	$128,458 58
For Fuel, Metropolitan Coal Company		386 10	
Furniture, furnishings and repairs :—			
Jas. Grant		9 75	
D. W. Hyde & Co.		8 29	
Hardware, tools and supplies :—			
Brock & Eaton	$7 37		
E. T. Bynner	6 08		
J. C. Moor	26 86		
W. A. Morrison	5 50		
F. A. White	29 07		
Jas. H. Wyeth & Co.	6 08		
Sundry persons	10 23		
		91 19	
Harness and repairs, etc. :—			
Chas. E. Berry	$5 00		
Jas. Forgie & Son	12 50		
C. D. Ormes	8 30		
		25 80	
Hay, grain and straw :—			
J. S. Bradeen & Co.	$95 18		
A. G. Dore & Co.	412 08		
E. R. Lovell & Co.	35 04		
		542 30	
Heating buildings :—			
Public Property, City Buildings Dept.		890 00	
Horse board :—			
George F. Whiting & Co.	$75 00		
Whiting & Prescott	225 00		
		300 00	
Horse clipping, Ferris & Co.		12 00	
Horseshoeing :—			
William Balmer	$24 50		
P. J. Callahan	27 00		
W. F. Garrett	9 00		
G. W. Lowd & Co.	61 25		
Street Department	7 00		
		128 75	
House repairs :—			
Carpentry, William H. Norris	$34 47		
Painting, glazing, etc. :—			
J. L P. Ackers	10 00		
George H. Hughes	163 55		
Plastering, William J. Heron & Co.	13 75		
		221 77	
Amounts carried forward		$126,362 78	$128,458 58

POLICE DEPARTMENT — Concluded.

Amounts brought forward		$126,362 78	$128,458 58
For Ice :—			
Boston Ice Co.	$13 84		
Fresh Pond Ice Co. . . .	30 58		
		44 42	
Laundry work :—			
Warren H. Dow	$22 75		
Rose Flynn	11 30		
		34 05	
Lighting :—			
Cambridge Electric Light Company	$92 69		
Cambridge Gas Light Company .	543 50		
		636 19	
Lunches :—			
Geo. H. Murray	$6 82		
C. White	7 48		
		14 30	
Medicines, drugs, etc. :—			
Geo. W. Douglass		5 95	
Pension, Benj. McKeen . . .		189 00	
Photographs, F. M. Ellis . . .		34 00	
Professional services :—			
P. J. Finnigan, M. D. . . .	$10 00		
I. Haines, M. D.	5 00		
Sundry persons	8 00		
		23 00	
Stationery and printing :—			
Caustic & Claflin	$77 25		
Cotton & Gould	170 23		
J. A. Cummings Printing Company	7 79		
Stationery Department . . .	57 20		
		312 47	
Sundries		46 32	
Telephone rent and tolls . . .		333 90	
Wagon repairs, Chas. Waugh & Co.		422 20	
Total			$128,458 58

PUBLIC LIBRARY, ADDITION.

Appropriation		$30,000 00
EXPENDED.		
For advertising and printing :—		
Press Newspaper Company . .	$3 40	
Plans, etc., Van Brunt & Howe . .	300 00	
Total		303 40
Balance unexpended . .		$29,696 60

PUBLIC LIBRARY.

Appropriation			$19,000 00
	RECEIVED.		
For dog licenses		$4,596 86	
Fines, etc.		629 67	
		$5,226 53	
	EXPENDED.		
For salaries of :—			
Librarian, Wm. L. R. Gifford	$2,649 99		
Assistants :—			
Etta L. Russell	787 95		
Winifred B. Smith	593 50		
Harriet D. Lochman	587 75		
Charlotte E. Stewart	594 82		
Jeannette I. Hallett	305 65		
Haida N. Parker	486 67		
Edith Callender	257 96		
Effie L. Chapman	162 15		
Alfred E. Thayer	450 00		
Sundry assistants	1,037 80		
Janitor, T. M. Thomas	1,173 21		
Assistant Janitor, R. C. Ray	20 00		
		9,107 45	
Awnings, Henry A. Wheeler & Co.		12 00	
Bindings and binders :—			
Boston Bookbinding Company	$156 10		
David Farquhar	273 36		
J. H. H. McNamee	752 35		
		1,181 81	
Books, periodicals, etc :—			
Amee Bros.	$629 18		
Babcock & Davis	15 00		
Balch Bros.	22 00		
Boston Book Company	19 22		
T. H. Castor & Co.	65 46		
Desmond Publishing Company	10 00		
Oliver Ditson Co.	37 06		
Funk & Wagnalls	6 00		
H. S. Inman	30 00		
Henry A. Johnson	7 50		
James H. Lamb Company	7 00		
Charles E. Lauriat Company	14 25		
Little, Brown & Co.	3,612 26		
George E. Littlefield	141 13		
Macmillan Company	5 00		
J. B. Millet Company	12 50		
John D. Morris & Co.	30 00		
Moulton Publishing Company	10 00		
Museum of Fine Arts	20 00		
C. A. Nichols Company	6 00		
Publishers' Weekly	12 50		
W. W. Potter Company	10 00		
The Owl Press	6 00		
James T. White & Co.	8 00		
H. W. Wilson	5 50		
Sundry persons	41 82		
		4,783 38	
Amounts carried forward		$15,084 64	$19,000 00

PUBLIC LIBRARY — Continued.

Amounts brought forward		$15,084 64	$19,000 00
For Boiler repairs :—			
Roberts Iron Works Company		75 00	
Car tickets :—			
Boston Elevated Railway Company		10 00	
Carriers :—			
Gilbert Davoren	$83 32		
Joseph S. Ralph	269 78		
		353 10	
Directories :—			
W. A. Greenough & Co.	$9 00		
Sampson, Murdock & Co.	5 00		
		14 00	
Draft regulator, S. E. Michell & Co.		30 00	
Expressage, Sawin's Express		40 85	
Fuel, Metropolitan Coal Company		444 50	
Furniture, furnishings and repairs :—			
Brock & Eaton	$12 30		
Boston Woven Hose Company	8 80		
Derby Desk Company	26 00		
Robt. Josselyn	22 85		
Library Bureau	12 20		
John T. Morris	12 35		
Sundry persons	4 91		
		99 41	
Hardware and supplies :—			
Brock & Eaton	$28 04		
Vulite, Vulite Syndicate	9 00		
Sundry persons	2 25		
		39 29	
House repairs :—			
Carpentry, Steadman A. Rice	$42 71		
Painting :—			
J. L. P. Ackers	6 90		
Cambridge Sign Company	8 00		
Roof repairs, Wm. Gordon	13 45		
		71 06	
Ice, Fresh Pond Ice Company		21 06	
Insurance, R. B. Walker		108 00	
Laundry work, T. M. Thomas		5 28	
Local stations :—			
M. I. Dow	$59 16		
E C. Gove	50 00		
J. W. Hunnewell	100 00		
Carrie E. Phillips	50 00		
The Prospect Union	60 00		
Michael Whalen	60 00		
P. A. Yerxa	39 57		
		418 73	
Amounts carried forward		$16,814 92	$19,000 00

PUBLIC LIBRARY — Concluded.

Amounts brought forward		$16,814 92	$19,000 00
For Lighting :—			
Cambridge Electric Light Company	$642 18		
Cambridge Gas Light Co.	354 80		
		996 98	
Mantels, Houghton & Dutton		25 92	
Repairing clock, J. W. Marshea		5 00	
Stamps, pads and ink :—			
H. C. Dimond & Co.		5 66	
Stationery, printing and typewriter supplies :—			
A. L. A. Publishing Board	$10 77		
Amee Bros.	7 30		
Boston Bank Note Company	15 25		
Caustic & Claflin	22 45		
J. A. Cummings Printing Company	61 04		
O. B. Graves	312 69		
Hooper, Lewis & Co.	43 22		
The Co-operative Press	40 00		
U. S. Card Index Company	18 75		
Edward W. Wheeler	328 95		
Sundry persons	11 39		
		871 81	
Sundries		14 42	
Telephone rent and tolls		62 13	
Typewriter repairs and supplies :—			
Hammond Typewriter Company		12 00	
Use of horse and wagon :—			
Prospect Stables	$26 00		
Ralph Smith & Co.	155 00		
		181 00	
Washing towels, T. M. Thomas		8 91	
Total			18,998 75
Balance unexpended			$1 25

PUBLIC LIBRARY.

EAST CAMBRIDGE BRANCH.

Appropriation			$1,320 00
	EXPENDED.		
For salaries of :—			
Superintendent, J. J. Henderson	$645 81		
Assistants :—			
E. A. Counihan, Jr.	22 50		
C. S. Marsh	78 00		
J. J. McCarthy	78 50		
		$824 81	
Amounts carried forward		$824 81	$1,320 00

PUBLIC LIBRARY, EAST CAMBRIDGE BRANCH — Concluded.

Amounts brought forward		$824 81	$1,320 00
For Binders and binding :—			
Boston Bookbinding Company	$25 48		
David Farquhar	13 92		
		39 40	
Books, periodicals, etc.			
Amee Bros.	$105 10		
Little, Brown & Co.	153 22		
		258 32	
Hardware and supplies, L. A. Stingel		13 02	
Lettering signs, Thos. Sweeney		5 50	
Lighting, Cambridge Gas Light Co.		37 00	
Moving furniture, Peter P. Durnan		6 00	
Rent, Robinson Estate		100 00	
Repairing chairs :—			
E. A. Cummings		8 60	
John T. Morris		5 20	
Sundries		7 00	
Tables, Wm. Leavens & Co.		15 00	
Total			1,319 85
Balance unexpended			15

PUBLIC PROPERTY.

THE ARMORY, BEECH STREET.

Appropriation			$2,300 00
EXPENDED.			
For gun cases, Isaac McLean		$280 00	
Rent of Gymnasium :—			
Samuel F. Woodbridge		2,000 00	
Total			2,280 00
Balance unexpended			$20 00

PUBLIC PROPERTY.

CITY BUILDINGS, CARE AND REPAIRS.

Appropriation			$19,500 00
Transferred from Contingent Fund			450 98
			19,950 98
RECEIVED.			
For care and heating	$1,365 00		
Error on pay-rolls	21 00		
Amounts carried forward	$1,386 00		$19,950 98

PUBLIC PROPERTY, CITY BUILDINGS, CARE AND REPAIRS — Continued.

Amounts brought forward . . .	$1,386 00		$19,950 98
For Rent :—			
Armory, Commonwealth of Mass.	2,000 00		
County of Middlesex . . .	450 00		
Old Bridge school house . . .	35 00		
Water Works Department . .	1,200 00		
Rent of land :—			
Wm. Hanlon	395 77		
J. W. Morse	48 00		
Second hand boiler	100 00		
		5,614 77	

EXPENDED.

For salaries of janitors . . .		10,478 01	
Dues, Gas Consumers' Association .		37 00	
Expressage, sundry persons . .		5 80	
Fuel :—			
P. F. Gayton	$24 15		
Metropolitan Coal Company . .	2,749 95		
Weighing	10 75		
		2,784 85	
Lighting :—			
Cambridge Electric Light Company	$1,635 93		
Cambridge Gas Light Company .	660 15		
		2,296 08	
Putting up awnings, De Lue & Co. .		8 00	
Use of chairs, Pettingell & Pear .		8 00	
Use of horse and carriage :—			
Ralph Smith & Co. . . .		10 00	
Repairs and alterations :—			
Carpentry :—			
F. B. Furbish . . .	$221 54		
W. H. Norris	702 92		
John Quin	184 74		
		1,109 20	
Elevator repairs :—			
Whittier Machine Company .		151 64	
Heating and ventilating apparatus repairs :—			
Greene & Co.	$66 32		
Higgins & Co.	57 88		
Edward Kendall & Sons . .	7 90		
Sundry persons	6 55		
		138 65	
Labor, Thos. J. Denton . . .		14 00	
Laying granolithic floor, City Hall :—			
Simpson Bros. Corporation .		243 00	
Amounts carried forward		$17,284 23	$19,950 98

PUBLIC PROPERTY, CITY BUILDINGS, CARE AND REPAIRS — Continued.

Amounts brought forward		$17,284 23	$19,950 98
For Repairs and alterations :—			
Lighting apparatus repairs :—			
E. W. Clark	$74 69		
Geo. F. Dickson	77 00		
Globe Gas Light Company	6 75		
Sundry persons	8 00		
		166 44	
Mason work, Wm. J. Rounds		158 16	
Painting, glazing, etc. :—			
J. L. P. Ackers	$118 50		
W. J. Edwards	9 50		
M. A. Feeley	334 90		
J. J. Foley	14 75		
S. M. Reed & Co.	7 55		
		485 20	
Plaster work, Wm. J. Heron		54 20	
Plumbing :—			
Brock & Eaton	$43 55		
E. W. Clark	347 38		
W. Haley	22 75		
Levi Hawkes	109 21		
Moynahan & Co.	9 00		
H. L. Rose	7 65		
		539 54	
Refitting sealer's office :—			
John C. Connors		37 50	
Sundries		10 09	
Weather strips :—			
Chamberlain Metal Weather Strip Co.		77 50	
Supplies :—			
Clocks and repairs :—			
Nelson H. Brown	$11 00		
Jas. A. Rice	6 75		
Geo. M. Stevens	6 58		
Sundry persons	3 00		
		27 33	
Electrical supplies and apparatus :—			
F. Bryant & Co.	$164 95		
Electric Department, wires	11 30		
Electric Gas Light Company	33 38		
General Electric Company	76 00		
Pettingell, Andrews Company	5 55		
		291 18	
Flags, L. W. Ferdinand & Co.		10 60	
Furniture and furnishings and repairs :—			
E. T. Bynner	$8 40		
Derby Desk Company	5 00		
F. M. Eaton	9 40		
Amounts carried forward	$22 80	$19,141 97	$19,950 98

PUBLIC PROPERTY, CITY BUILDINGS, CARE AND REPAIRS—Concluded.

Amounts brought forward . . .	$22 80	$19,141 97	$19,950 98
For Supplies:—			
Furniture and furnishings and repairs:—			
Franklin Rubber Company . .	21 62		
The Globe Wernicke Company .	10 00		
James Grant	20 08		
S. H. Harrington	9 50		
V. O. Kalberg	25 30		
David Thomson	96 20		
A. G. Willis	7 00		
Worcester Bros.	22 16		
		234 66	
Hardware, tools and supplies:—			
American Tool and Machine Co. .	$7 35		
Brock & Eaton	40 88		
E. T. Bynner	52 55		
Wm. H. Claflin & Co. . . .	6 50		
J. H. Corcoran & Co. . . .	6 55		
Daniel H. Dean	7 50		
D. W. Hyde & Co.	15 05		
Phipps Bros.	11 40		
Sundry persons	17 89		
F. A. White	29 28		
		194 95	
Ice, Fresh Pond Ice Company . .		67 19	
Oil and engine supplies:—			
Eagle Oil and Supply Company .	$66 60		
Lubron Packing Company . .	62 00		
W. A. Morrison	27 59		
Standard Oil Company . . .	5 70		
		161 89	
Paper, F. L. Sawtell		6 85	
Polish, Edw. McDermott & Co. .		6 75	
Prisms, American Luxfer Prism Co.		93 00	
Soap:—			
Fels & Co.	$15 35		
Chas. R. Teele	7 50		
		22 85	
Sundries		20 87	
Total			$19,950 98

SUMMARY: EXPENDED.

Salaries of janitors	$10,478 01	
Fuel	2,784 85	
Lights	2,296 08	
Repairs and alterations . . .	3,253 92	
Supplies	1,138 12	
		$19,950 98

PUBLIC PROPERTY.

INCIDENTALS.

Appropriation			$5,450 00
Transferred from Contingent Fund			600 00
			$6,050 00
Transferred to Contingent Fund			150 00
			$5,900 00

EXPENDED.

For Salaries of :—			
Superintendent of buildings :—			
Wm. H. Gray	$2,000 00		
Inspectors :—			
J. W. Emery	1,200 00		
L. G. Garfield	499 20		
C. H. M. Hunnewell	1,000 00		
Clerk, Lillian W. Hyde	313 00		
		$5,012 20	
Bicycle repairs, Sundry persons		6 25	
Care and repair of tower clocks :—			
Chas. H. Chandler	$26 00		
E. Howard Clock Co.	12 20		
A. K. Jones	52 00		
J. B. Mace	26 00		
John W. Moore	18 75		
Geo. M. Stevens	46 00		
		180 95	
Car tickets :—			
Boston Elevated Railway Company		130 00	
Horse board :—			
George F. Whiting & Co.	$75 00		
Whiting & Prescott	225 00		
		300 00	
Horseshoeing :—			
Wm. Balmer	$7 75		
W. F. Garrett	8 00		
		15 75	
Photographs, Jos. L. Gomes		7 10	
Services as expert, T. H. Raymond		25 00	
Stationery, printing, etc. :—			
Cambridge Chronicle Company	$22 25		
Caustic & Claflin	8 00		
Cotton & Gould	86 26		
J. A. Cummings Printing Company	20 66		
Frost & Adams Company	8 10		
Levi P. Jennings	13 50		
Stationery Department	33 80		
		192 57	
Sundries		17 74	
Total			5,887 56
Balance unexpended			$12 44

PUBLIC PROPERTY.

LAND FOR SCHOOL HOUSE, WARD TWO.

Appropriation		$9,500 00
EXPENDED.		
For land, George D. Heffernan	$9,500 00	
Total		9,500 00

PUBLIC PROPERTY.

NEW SCHOOL HOUSE, WARD ONE.

Appropriation		$79,984 53
EXPENDED.		
For Contract for building, Fessenden & Libby Company	$49,462 50	
Electrical work, F. Bryant & Co.	61 75	
Heating and ventilating :—		
Lynch & Woodward	5,584 08	
Labor as per pay rolls	24 38	
Plans, etc., Geo. Fogerty	3,749 05	
Putting in conductor, E. W. Clark	114 83	
Sundries	7 05	
Total		59,003 64
Balance unexpended		$20,980 89

PUBLIC PROPERTY.

NEW SCHOOL HOUSE, WARD TWO.

Appropriation		$80,000 00
EXPENDED.		
For printing :—		
Cambridge Chronicle Company	$9 50	
Soundings, B. F. Smith & Bro.	66 70	
Total		76 20
Balance unexpended		$79,923 80

PUBLIC PROPERTY.

RIFLE RANGE.

Appropriation		$150 00
EXPENDED.		
For carpentry, W. H. Norris	$147 96	
Total		147 96
Balance unexpended		$2 04

PUBLIC PROPERTY.

SANITARY ARRANGEMENTS, SCHOOLHOUSES.

Appropriation			$30,000 00
EXPENDED.			
For Gannett School:—			
Contract, Thos. F. Martin	$2,475 00		
Mason work, James Connell	57 27		
		$2,532 27	
Lassell School:—			
Contract, H. L. Rose	$3,496 00		
Heating apparatus, Higgins & Co.	185 46		
		3,681 46	
New Latin School:—			
Plans, etc.:—			
Hartwell, Richardson & Driver		1,915 09	
Rindge Manual Training School:—			
Building tunnels, John B. Byrne	$2,621 00		
Heating, Lynch & Woodward	5,085 00		
New drain at Rindge Manual Training School, E. W. Clark	436 71		
		8,142 71	
Riverside School:—			
Contract, Frank J. O'Reilly		3,450 00	
"Riverside" and "Lassell":—			
Specifications, G. W. Sanborn		5 00	
Tarbell:—			
Contract, Thos. F. Martin		3,850 00	
Sundries		15 00	
Total			23,591 53
Balance unexpended			$6,408 47

PUBLIC PROPERTY.

SCHOOLHOUSES, CARE AND REPAIRS.

Appropriation		$75,000 00
Transferred from Contingent Fund		1,204 72
		$76,204 72

RECEIVED.

For sale of Lee Street schoolhouse	$6,000 00	

EXPENDED.

For salaries of janitors		34,226 45	
Auction sale, Lee Street School:—			
Samuel R. Knights & Co.		123 52	
Expressage and moving furniture:—			
P. Biggin	$58 25		
Donovan's Express	9 71		
Sundry persons	12 10		
		80 06	
Fuel:—			
Coleman Bros.	$680 13		
P. F. Gayton & Co.	239 59		
Metropolitan Coal Company	15,561 89		
Richardson & Bacon	12 75		
Weighing, P. J. White	128 50		
		16,622 86	
Inspecting boilers, S. C. Baxter		74 00	
Lighting:—			
Cambridge Electric Light Co.	$2,155 32		
Cambridge Gas Light Co.	600 62		
		2,755 94	
Printing:—			
Cambridge Chronicle Company		24 00	
Repairs and alterations:—			
Carpentry:—			
Alfred Allcock	$53 37		
M. C. Beedle	30 93		
E. W. Boynton	37 94		
Edwin O. Brock	71 23		
Colin Chisholm	28 99		
W. Fillmore & Co.	245 86		
O. B. French	98 19		
Matthew Kelly	10 00		
W. H. Norris	1,943 59		
John Quin	701 17		
I. B. Rice	45 30		
Sundry persons	6 60		
		3,273 17	
Amounts carried forward		$57,180 00	$76,204 72

PUBLIC PROPERTY, SCHOOLHOUSES, CARE AND REPAIRS — Continued.

Amounts brought forward . . .		$57,180 00	$76,204 72
For repairs and alterations :—			
Electrical work :—			
F. Bryant & Co.	$18 01		
Electrical Department, Wires .	40 10		
		58 11	
Excavating for walks and grading, Wellington School :—			
John S. Jacobs & Son . . .		129 00	
Fence, A. Simpson		151 00	
Heating and ventilating repairs :—			
Brock Brothers	$194 64		
Brock & Eaton	533 08		
Isaac Coffin & Co.	146 72		
Wm. Fitzgerald	82 93		
F. W. Foster Manufacturing Co. .	86 00		
Greene & Co.	371 06		
W. Haley	466 68		
Higgins & Co.	1,670 62		
Lynch & Woodward . . .	503 40		
Moynahan & Co.	629 25		
J. F. Pennell	155 42		
Pennell & Co.	42 78		
Roberts Iron Works Company .	8 36		
B. F. Sturtevant Company . .	7 95		
Sundry persons	7 47		
D. J. Wild & Co.	176 75		
		5,083 11	
Mason work :—			
John B. Byrne	$643 36		
A. W. Curtis	45 39		
John Delaney	7 20		
Henry McGahey	50 05		
Wm. J. Rounds	954 40		
H. N. Stearns	13 28		
		1,713 68	
Painting, glazing, etc. :—			
J. L. P. Ackers	$868 64		
L. Bresnahan	7 10		
Wm. C. Carroll	24 15		
M. A. Feeley	885 25		
Henry Haley	26 00		
John S. Kenney	5 50		
M. F. Marks	9 50		
Chas. A. Sawyer	84 26		
Sundry persons	3 75		
Woods Brothers & Co. . . .	76 30		
		1,990 45	
Plaster work :—			
Wm J. Heron	$473 79		
M. L. Hurley & Co. . . .	13 00		
S. M. Reed & Co.	5 35		
		492 14	
Amounts carried forward		$66,797 49	$76,204 72

PUBLIC PROPERTY, SCHOOLHOUSES, CARE AND REPAIRS — Continued.

Amounts brought forward		$66,797 49	$76,204 72
For repairs and alterations :—			
Plumbing and sanitary repairs :—			
Brock Brothers	$220 82		
Brock & Eaton	9 46		
E. W. Clark	298 68		
Chas. A. Fallon	254 22		
W. Haley	102 93		
Levi Hawkes	113 68		
Higgins & Co.	11 56		
D. J. Keefe & Co.	210 21		
John J. Long	45 33		
J. T. Phelan	39 89		
Jas. A. Reid	10 40		
Albert H. Ricker	65 52		
H. L. Rose	2,165 30		
John H. Stevens & Co.	65 13		
Sundry persons	10 03		
		3,623 16	
Pointing and repairing chimney Wellington School :—			
J. S. Jacobs & Son		420 00	
Roof repairs, etc :—			
John J. Blevins	$691 74		
H. F. Peak	192 98		
		884 72	
Tinned doors at Latin School :—			
Geo. T. McLauthlin & Co.		32 50	
Weather strips :—			
Chamberlin Metal Weather Strip Co.		130 60	
Supplies :—			
Clocks and repairs :—			
A. J. Applegate Company	$11 25		
Nelson H. Brown	22 00		
Simon Flaig	7 00		
Jas. A. Rice	10 75		
Sundry persons	7 00		
		58 00	
Disinfectants :—			
C. W. Lerned & Co.	$25 00		
The Sulpho-Napthol Company	24 00		
		49 00	
Dusters, brooms, brushes, etc. :—			
W. Kingsley Browne	$17 50		
Burditt & Bynner	120 40		
A. & E. Burton & Co.	56 00		
E. T. Bynner	193 81		
E. H. Patten	7 00		
F. Pelkey	6 00		
Sundry persons	10 59		
G. H. Worcester & Co.	121 63		
		532 93	
Amounts carried forward		$72,528 40	$76,204 72

PUBLIC PROPERTY, SCHOOLHOUSES, CARE AND REPAIRS — Continued.

Amounts brought forward		$72,528 40	$76,204 72
For Supplies:—			
Furniture, furnishings and repairs:—			
Allen Shade Holder Co.	$7 50		
American Blackboard Co.	501 96		
Brock Bros.	6 35		
Burditt & Bynner	81 28		
E T. Bynner	126 75		
Chandler Adjustable Chair & Desk Works	317 00		
P. Derby & Co.	9 50		
Derby Desk Company	125 00		
F. M. Eaton	27 20		
Jas. Grant	490 04		
J. L. Hammett Company	39 65		
S. H. Harrington	179 09		
Heywood Bros. & Wakefield Co.	47 70		
John H. Kelsey	5 30		
Henry McElwin	25 38		
Geo. S. Perry & Co.	13 75		
Phillips Bros & Co.	53 00		
Geo. W. Smith	127 54		
Sundry persons	6 15		
D. P. Thompson	126 36		
Webster, Cook & Co.	19 50		
Worcester Bros.	44 75		
		2,380 75	
Hardware, tools and supplies:—			
Brock Brothers	$27 60		
Brock & Eaton	8 03		
Burditt & Bynner	62 73		
E. T. Bynner	84 27		
Wm. H. Claflin & Co.	24 50		
Dover Stamping Co.	8 00		
Leonard & Ellis	11 50		
Morss & Whyte	56 70		
Phipps Brothers	17 30		
F. L Sawtell	13 00		
Sundry persons	25 70		
Chas. Waugh & Co.	8 50		
F. A. White	7 25		
D. J. Wild & Co.	17 25		
W. A. Wood & Co.	6 50		
		378 83	
Ladders, C. W. H. Moulton & Co.		9 50	
Lighting apparatus:—			
Blodgett Bros. & Co.	$78 13		
F. Bryant & Co.	166 16		
Clark & Mills	69 00		
Electrical Department, Wires	22 65		
Electric Gas Light Company	14 94		
General Electric Company	38 00		
W. Haley	50 08		
Moynahan & Co.	10 64		
Sundry persons	4 54		
		454 14	
Amounts carried forward		$75,751 62	$76,204 72

PUBLIC PROPERTY, SCHOOLHOUSES, CARE AND REPAIRS — Concluded.

Amounts brought forward		$75,751 62	$76,204 72
For Supplies :—			
Lockers, T. H. Raymond		50 00	
Lumber, Geo. W. Gale Lumber Co.		12 95	
Oil, Eagle Oil and Supply Co.		66 00	
Sawdust, Geo. G. Page Box Co.		36 25	
Slate, Union Soapstone Co.		118 80	
Soap and powder :—			
India Alkali Works	$20 70		
Chas. R. Teele	7 50		
Savena Manufacturing Co.	46 13		
		74 33	
Sundries		18 57	
Total			76,128 52
Balance unexpended			$76 20

SUMMARY: EXPENDED.

For salaries of janitors	$34,226 45	
Expense of auction sale	123 52	
Fuel	16,622 86	
Lighting	2,755 94	
Repairs and alterations	18,055 64	
Supplies	4,344 11	
Total		$76,128 52

PUBLIC PROPERTY.

WELLINGTON, GORE AND FELTON SCHOOLS.

Appropriation	$5,403 05

EXPENDED.

For Wellington School :—		
Alterations, John S. Jacobs & Son	$3,655 68	
Heating and ventilating :—		
Cleghorn Company	126 35	
Painting, M. A. Feeley	48 00	
Plumbing, etc., Thos. F. Martin	316 32	
Sundries	3 25	
Total, Wellington School	$4,149 60	

GORE SCHOOL.

EXPENDED.

For heating and ventilating :—		
Greene & Co.	$482 30	
Roof repairs, John J Blevins	327 84	
Total, Gore School	$810 14	
Amount carried forward		$5,403 05

PUBLIC PROPERTY — Continued.

FELTON SCHOOL.

Amount brought forward		$5,403 05
EXPENDED.		
For heating and ventilating :—		
H. L. Rose	$230 31	
Painting, M. A. Feeley	193 50	
Total, Felton School	$423 81	
Total, Wellington, Gore and Felton Schools		5,383 55
Balance unexpended		$19 50

SCHOOL DEPARTMENT.

CARE OF TRUANTS.

Appropriation		$1,700 00
Transferred from Contingent Fund		118 69
		$1,818 69
RECEIVED.		
For care of truants, County of Middlesex	$7 50	
EXPENDED.		
For board :—		
Middlesex County Truant School	1,798 44	
Car tickets :—		
Boston & Lowell Railroad	20 25	
Total		$1,818 69

SCHOOL DEPARTMENT.

FLAGS.

Appropriation		$200 00
EXPENDED.		
For flag poles :—		
H. Pigeon & Sons	$52 00	
Halyards, etc :—		
Henry A. Wheeler & Co.	27 50	
Placing halyards, Sundry persons	6 00	
Repairing flags :—		
Frank Greenidge & Co	37 50	
Total		123 00
Balance unexpended		$77 00

SCHOOL DEPARTMENT.

INCIDENTALS.

Appropriation		$1,600 00
Transferred from Contingent Fund		335 70
		$1,935 70

EXPENDED.

For salaries :—			
Secretary, S. B. Hubbard	$400 00		
Messenger, Frank T. Evans	25 00		
		$425 00	
Advertising :—			
Cambridge Chronicle Company	$5 75		
Sundry persons	9 10		
		$14 85	
Carting pianos, Chickering & Sons		15 00	
Car tickets :—			
Boston Elevated Railway Company		200 00	
Cash expended, Francis Cogswell		23 36	
Copying census returns :—			
Elizabeth McCrehan	$15 00		
Florence E. Porter	12 75		
		27 75	
Expenses of Sanders Theatre :—			
Harvard University		10 00	
Postage, F. M. Small		101 20	
Services :—			
Elizabeth L. Huling	$8 00		
Sundry persons	6 00		
		14 00	
Stationery, printing and typewriting supplies :—			
Cambridge Chronicle Company	$35 75		
J. A. Cummings Printing Company	171 19		
J. Frank Facey	60 10		
G. B. Lenfest	7 50		
L. F. Weston	134 25		
		408 79	
Statistics, Lucian S. Cabot		12 00	
Stereopticon, John H. Thurston		19 00	
Sundries		5 90	
Taking census :—			
Walter K. Cabot	$27 50		
Matthew P. Carmichael	87 50		
Warren Ivers	51 00		
Jas. E. Lennon	40 00		
Geo. H. Munroe	145 50		
Thos. F. Murphy	18 00		
		369 50	
Telephone rent and tolls		258 85	
Vaccine virus, N. E. Vaccine Co.		30 50	
Total			$1,935 70

SCHOOL DEPARTMENT.

SALARIES.

Appropriation	$343,000 00
Transferred to Contingent Fund	1,300 00
	$341,700 00

RECEIVED.

For errors in pay-rolls	$16 50
Hopkins Charity Fund	637 61
Tuition of non-residents	4,100 00
Tuition, Commonwealth of Mass.	524 00
Tuition at Rindge Manual Training School	1,925 00
	$7,203 11

EXPENDED.

For salaries of :—			
Superintendent, Francis Cogswell			$3,500 00
Superintendent's clerk :—			
Althea B. Frost			750 00
Agent, S. B. Hubbard			2,100 00
Clerk, Myrta E. Smith			600 00
Special Instructors :—			
Botany, Sarah E. Brassill	$1,000 00		
Drawing :—			
Peter Roos	1,830 00		
Lucia N. Jennison	800 00		
Gymnastics, Sara E. Boudren	900 00		
Music, Fred'k E. Chapman	2,000 00		
Sewing :—			
Nancy T. Dawe	558 00		
Agnes Gordon	630 00		
Alice H. Nay	600 00		
Primary Supervisor, Mary A. Lewis	1,200 00		
		9,518 00	
Salaries of teachers in :—			
Latin School	$23,710 34		
English High School	26,265 58		
Grammar Schools	127,882 80		
Primary Schools	87,492 21		
Wellington Training School	14,742 20		
Kindergarten Schools	15,827 34		
Substitutes	1,308 00		
Rindge Manual Training School	17,988 33		
		315,216 80	
Amounts carried forward		$331,684 80	$341,700 00

SCHOOL DEPARTMENT, SALARIES — Concluded.

Amounts brought forward		$331,684 80	$341,700 00
For salaries of :—			
Teachers in evening schools :—			
Drawing	$1,205 00		
High	1,551 75		
Allston	1,182 00		
Putnam	603 50		
Shepard	510 00		
Webster	482 00		
		5,534 25	
Salaries of truant officers		3,860 00	
Porter, John H. Lemon		600 00	
Rebate on tuition :—			
Mrs. Ella M. Wheeler		5 00	
Total			341,684 05
Balance unexpended			$15 95

SCHOOL DEPARTMENT.

TEXT BOOKS AND SUPPLIES.

Appropriation		$20,000 00
Transferred from Contingent Fund		786 75
		$20,786 75

RECEIVED.

For sale of, and damage to, books	$342 91	

EXPENDED.

For apparatus and supplies :—		
Adams, Cushing & Foster	$1,572 11	
Barbour-Stockwell Company	59 50	
Blodgett, Ordway & Webber	20 99	
Brown, Durrell & Co.	29 39	
Brown & Wales	202 98	
Bunkio Matsuki	42 00	
Burditt & Williams	48 39	
Chandler & Barber	864 19	
Chand er & Farquhar	30 00	
Cook-Vivian Company	4,664 70	
Davidson Rubber Company	22 35	
Dexter Brothers	33 21	
Diamond Paste Company	29 75	
Frost & Adams Company	226 52	
Gaylord Brothers	35 00	
J. L. Hammett Company	311 99	
J. A. Holmes & Co.	6 95	
John A. Hubbard	33 17	
D. W. Hyde & Co.	7 61	
L. E. Knott Apparatus Company	552 91	
F P. Merrill	118 66	
Theodore Metcalf Company	104 28	
Amounts carried forward	$9,016 65	$20,786 75

SCHOOL DEPARTMENT, TEXT BOOKS AND SUPPLIES — Continued.

Amounts brought forward	$9,016 65		$20,786 75
For apparatus and supplies :—			
Alex. Millan	5 93		
A. M. Robbins	7 11		
A. G. Smalley & Co.	5 30		
J. H. Stedman & Co.	6 00		
Sundry persons	12 76		
Wadsworth, Howland & Co.	176 58		
Walworth Manufacturing Company	13 32		
		9,243 65	
Binding, J. H. H. McNamee		398 53	
Books :—			
Allyn & Bacon	$36 25		
American Book Company	957 27		
Edward E. Babb & Co.	274 32		
Boston School Supply Company	431 94		
T. H. Castor & Co.	185 10		
DeWolfe, Fiske & Co.	102 79		
Oliver Ditson Company	24 57		
Ginn & Co.	2,403 90		
Gregg Publishing Company	75 00		
Thos. Groom & Co.	39 00		
Wm. H. Guild & Co.	17 20		
J. L. Hammett Company	100 81		
D. C. Heath & Co.	315 60		
Houghton, Mifflin & Co	453 70		
Longmans, Green & Co.	126 00		
The Morse Company	30 00		
Prang Educational Company	6 96		
Rand, McNally & Co.	72 00		
Benj. H. Sanborn & Co.	15 00		
Thos. R. Shewell & Co.	250 75		
Sibley & Ducker	9 37		
Silver, Burdett & Co.	289 69		
Thompson, Brown & Co.	1,587 84		
University Publishing Company	181 76		
Wm. Ware & Co.	148 25		
		8,135 07	
Boxes, Charles Place		75 00	
Diplomas, Boston Bank Note Co.		168 35	
Engrossing, Boston Bank Note Co.		13 60	
Expressage and moving cases :—			
Bancroft's Express	$9 50		
H. W. Bettinson & Co.	17 20		
P. Biggin	179 55		
W. A. Nichols	69 75		
Sawin's Express	47 85		
		323 85	
Fuel, Coleman Bros.		75 00	
Ice, Fresh Pond Ice Company		5 85	
Lathes, S. T. Lund		400 00	
Lumber, Geo. W. Gale Lumber Co.		682 04	
Piano stools and covers :—			
E. M. Cundall		35 00	
Amounts carried forward		$19,555 94	$20,786 75

SCHOOL DEPARTMENT, TEXT BOOKS AND SUPPLIES — Concluded.

Amounts brought forward		$19,555 94	$20,786 75
For Postage, F M. Small		178 40	
Printing :—			
Harold W. Bennett	$18 00		
Cambridge Chronicle Company	6 75		
Caustic & Claflin	119 50		
J. Frank Facey	44 25		
G. B. Lenfest	13 50		
Rand, McNally & Co.	52 80		
Louis F. Weston	242 40		
		497 20	
Rent of piano, Briggs & Briggs		47 00	
Ribbons, Brown, Durrell & Co.		42 81	
Sharpening tools, H. C. Higgins		12 06	
Subscriptions :—			
New England Publishing Company		10 65	
Sundries		17 20	
Tuning pianos, Chas. H. Fosgate		11 25	
Typewriters and supplies :—			
Duren & Kendall	$240 00		
United Typewriter & Supply Co.	80 00		
Wyckoff, Seamans & Benedict	70 00		
		390 00	
Washing, Mrs. Catherine A. Flynn		24 24	
Total			$20,786 75

SCHOOL DEPARTMENT.

VACATION SCHOOLS.

Appropriation			$2,000 00
Transferred to Contingent Fund			100 00
			$1,900 00
EXPENDED.			
For salary pay-roll		$1,563 00	
Apparatus and supplies :—			
Adams, Cushing & Foster	$6 76		
Brown, Durell & Co.	14 16		
Burditt & Williams	14 16		
Chandler & Barber	22 58		
Geo W. Gale Lumber Company	170 48		
Frank P. Merrill	12 61		
School Dept. Text-books, etc.	26 14		
Sundry persons	2 33		
Wadsworth, Howland & Co.	20 07		
		289 29	
Amounts carried forward		$1,852 29	$1,900 00

SCHOOL DEPARTMENT, VACATION SCHOOLS — Concluded.

Amounts brought forward		$1,852 29	$1,900 00
For Books, Ginn & Co.	$8 60		
Sundry persons	5 99		
		14 59	
Printing, Louis F. Weston		17 50	
Sundries		1 10	
Total			1,885 48
Balance unexpended			$14 52

SEALER OF WEIGHTS AND MEASURES.

Appropriation			$1,600 00
Transferred from Contingent Fund			363 73
			1,963 73

RECEIVED.

For fees for sealing, A. S. K. Clark		$710 00	
Fees for weighing :—			
W. B. Churchill	$11 19		
E. I. Train	54 83		
		66 02	
Overcharge for advertising :—			
A. F. Roberts		26 50	
		$802 52	

EXPENDED.

For salary of sealers :—			
A. F. Roberts	$416 65		
A. S. K. Clark	564 49		
		981 14	
Advertising :—			
Cambridge Chronicle Company		27 56	
Carpentry, John Quin		60 02	
Carriage and wagon repairs :—			
Geo. O. Rollins Carriage Company	$17 50		
Sundry persons	5 09		
		22 59	
Car tickets :—			
Boston Elevated Railway Company		15 00	
Cash expended for sundries :—			
A. S. K. Clark		5 70	
Furnishings, Worcester Brothers		15 46	
Hardware, tools and supplies :—			
Sundry persons		10 11	
Amounts carried forward		$1,137 58	$1,963 73

SEALER OF WEIGHTS AND MEASURES — Concluded.

Amounts brought forward		$1,137 58	$1,963 73
For Horse board, Street Department		166 80	
Horseshoeing, Street Department		14 65	
Lumber :—			
E. D. Sawyer & Co.	$25 34		
Sundry persons	3 78		
		29 12	
Scales, measures, etc. :—			
The Fairbanks Company	$7 50		
Herman Strater & Sons	17 90		
Henry Troemer	59 35		
		84 75	
Sealing, John C. Connors		423 75	
Stamps & brands, James Ryan		5 25	
Stationery, printing, etc. :—			
Cambridge Chronicle Company	$7 25		
Caustic & Claflin	17 50		
F. A. Dunbar	7 50		
Library Bureau	46 00		
Stationery Department	7 88		
Sundry persons	5 32		
		91 45	
Sundries		10 38	
Total			$1,963 73

SEWER DEPARTMENT.

CONSTRUCTION.

Appropriation			$18,000 00
RECEIVED.			
For Assessments		$6,523 55	
Award to Henderson Bros., City of Somerville		164 02	
Clay		41 16	
Permits to drain :—			
Boston Elevated Railway Company	$250 00		
Cambridge Hospital	52 00		
Harvard College	80 00		
Sundry persons	193 61		
		575 61	
Sand		73 00	
		$7,377 34	
Amount carried forward			$18,000 00

SEWER DEPARTMENT, CONSTRUCTION — Concluded.

Amount brought forward			$18,000 00
EXPENDED.			
For labor as pay-rolls		$5,709 54	
Bricks :—			
New England Brick Company	$566 40		
Parry Bros.	109 25		
		675 65	
Cutting catch-basin stones :—			
Austin Ford & Son		93 60	
Frames, grates, traps, castings, etc. :—			
Barbour Stockwell Company	$152 58		
Boston Double-Catch-basin, Sewer and House Trap Co.	201 60		
Osgood & Witherly	468 86		
		823 04	
Hardware, E. T. Bynner		34 51	
Lumber and cement :—			
Wm. H. Wood & Co.		348 66	
Pipe and cement :—			
Fiske & Co.	$270 25		
D. W. Lewis	1,261 78		
		1,532 03	
Services in matter of Binney Street Sewer Case :—			
Josiah G. Chase	$15 00		
Jas. W. Coleman	25 00		
East Cambridge Land Co.	130 00		
L. M. Hannum	50 00		
Chas. P. Keith	75 00		
Wm. V. Thompson	45 00		
		340 00	
Sundries		8 80	
Teaming, sundry persons		138 75	
Use of pump and engine :—			
George E. Worthen		36 00	
Total			9,740 58
Balance unexpended			$8,259 42

SEWER DEPARTMENT.

IMPROVED SEWERAGE.

Appropriation			$125,391 65
EXPENDED.			
For labor as per pay-rolls		$43,978 26	
Boots, Robert Josselyn		61 20	
Amounts carried forward		$44,039 46	$125,391 65

SEWER DEPARTMENT, IMPROVED SEWERAGE — Continued.

Amounts brought forward		$44,033 46	$125,391 65
For Bricks :—			
N. E. Brick Company	$2,884 58		
Parry Brothers & Co.	669 75		
		3,554 33	
Canvas covers, Nolan Brothers		47 80	
Cleaning catch-basins, John Horigan		140 00	
Drain work, Samuel McCulloch		54 57	
Execution of Court :—			
Boston & Albany Railroad		200 00	
Expense of putting in sewer at North Cambridge Junction, Boston & Maine Railroad		699 19	
Fuel :—			
Coleman Brothers	$337 83		
Metropolitan Coal Company	392 96		
		730 79	
Gates, frames, covers, etc. :—			
Barbour-Stockwell Company	$175 83		
Mechanics' Iron Foundry	16 38		
Osgood & Witherly	334 93		
		527 14	
Hardware, tools, repairs and supplies :—			
Burditt & Bynner	$34 43		
E. T. Bynner	999 68		
James Maitland	92 56		
Morss & Whyte	6 00		
Fred V. Smith	41 40		
Daniel J. Sullivan	85 80		
Sundry persons	4 45		
		1,264 32	
Harness, etc., Wm. H. Roberts		5 50	
Heater, etc., Wm. Campbell & Co.		91 76	
Iron work, Miller & Shaw		228 61	
Labor and materials :—			
Water Works Department		323 60	
Lumber and cement :—			
William H. Wood & Co.		7,729 61	
Mill work :—			
J. H. Keenan & Co.	$1,233 30		
H. A. Scranton	64 29		
		1,297 59	
Oil, Standard Oil Company		78 13	
Pipe, Cambridge Gas Light Company		16 25	
Pipe and cement :—			
Fiske & Co.	$1,997 50		
D. W. Lewis	2,578 97		
		4,576 47	
Amounts carried forward		$65,605 12	$125,391 65

SEWER DEPARTMENT, IMPROVED SEWERAGE — Concluded.

Amounts brought forward		$65,605 12	$125,391 65
For Sand and gravel:—			
Wm. B. Mullen	$3,420 48		
Thos. O'Hara	194 28		
		3,614 76	
Stone:—			
Massachusetts Broken Stone Co.	$638 52		
Wm. B Mullen	333 33		
Street Department	72 08		
		1,043 93	
Sundries		18 26	
Teaming, sundry persons		2,007 41	
Timbering tracks:—			
Boston & Maine Railroad		116 13	
Trench machines:—			
Carson Trench Machine Company		2,085 03	
Use of engine and pumps:—			
E. R. Cheney	$301 00		
John T. Scully & Bro.	195 00		
Geo. E. Worthen	1,347 50		
		1,843 50	
Use of horses, A. J. Furbush		206 00	
Use of water:—			
Metropolitan Storage Warehouse Co.		6 00	
Total			76,546 14
Balance unexpended			$48,845 51

SEWER DEPARTMENT.

MAINTENANCE.

Appropriation	$20,000 00
Transferred to Contingent Fund	1,050 00
	$18,950 00

RECEIVED.

For hose	$12 43
Old material	127 67
Repairing manhole, etc.	38 38
Sand	47 50
Sundries	11 44
	$237 42

EXPENDED.

For salaries:—			
Superintendent, T. L. Pike	$2,000 00		
Clerk, Mary E. Rowen	391 25		
		2,391 25	
Amounts carried forward		$2,391 25	$18,950 00

SEWER DEPARTMENT, MAINTENANCE — Continued.

Amounts brought forward		$2,391 25	$18,950 00
For Labor as per pay-rolls		7,779 25	
Advertising and printing :—			
The Boston Herald Company		14 25	
Boots, Robert Josselyn		122 40	
Bricks, New England Brick Co.		330 15	
Car tickets :—			
Boston Elevated Railway Company		125 00	
Canvas covers, Nolan Bros.		47 80	
Cart, Street Department		50 00	
Castings, Osgood & Witherly		31 81	
Caravan, Chas. Waugh & Co.		225 00	
Cleaning catch-basins, John Horigan		3,372 00	
Clocks and repairs :—			
The A. J. Applegate Company	$16 65		
Edgar Hall	14 75		
		31 40	
Cutting catch-basin stones :—			
Austin Ford & Sons		36 00	
Fitting lights and Electric Works :—			
F. Bryant & Co.		22 07	
Fuel, Coleman Bros.		12 50	
Gravel, Wm. B. Mullen		80 21	
Hardware, tools and repairs, and supplies :—			
Burditt & Bynner	$114 09		
E. T. Bynner	307 90		
Jas. Maitland	111 46		
Morss & Whyte	9 60		
Sundry persons	8 94		
		551 99	
Harness and repairs and horse-clothing :—			
James Forgie & Son	$24 00		
F. Ivers & Son	120 50		
Wm. H. Roberts	203 02		
		347 52	
Hay, grain and straw :—			
E. R. Luke & Co.	$691 65		
L. G. Stone	7 50		
		699 15	
Heating apparatus, Brock Brothers		9 15	
Horses :—			
R. J. Estabrook	$200 00		
Welch & Hall Company	160 00		
		360 00	
Horseshoeing, John F. Gurry & Sons		177 00	
Amounts carried forward		$16,815 90	$18,950 00

SEWER DEPARTMENT, MAINTENANCE — Concluded.

Amounts brought forward		$16,815 90	$18,950 00
For Hose, packing, etc. :—			
Boston Woven Hose Company		71 67	
Iron buckets, Chas. W. Henderson		9 00	
Iron work, Miller & Shaw		71 93	
Lighting :—			
Cambridge Electric Light Company		16 59	
Lumber and cement :—			
E. D. Sawyer & Co.	$260 86		
William H. Wood & Co.	132 21		
		393 07	
Mill work :—			
J. H. Keenan & Co.	$168 64		
H. A. Scranton	21 45		
		190 09	
Oat meal, Charles James		22 50	
Oil, Standard Oil Company		44 35	
Oil clothing, H. M. Sawyer & Co.		42 80	
Painting, Adelbert D. Garland		175 00	
Pipe and cement, D. W. Lewis		282 53	
Printing, Cambridge Chronicle Co.		9 00	
Roof repairs, Wm. Gordon		16 00	
Stationery, Stationery Department		14 23	
Strainers, etc. :—			
Edson Manufacturing Company		27 79	
Sundries		16 06	
Traps :—			
Boston Double Catch-basin, Sewer and House Trap Company		42 00	
Teaming, sundry persons		62 75	
Telephone rent and tolls		40 45	
Use of engine, Geo. E. Worthen		287 00	
Wagon and carriage repairs :—			
F. Ivers & Son	$193 10		
Geo. Patterson	7 00		
Chas Waugh & Co.	78 18		
		278 28	
Total			18,928 99
Balance unexpended			$21 01

SINKING FUNDS.

CAMBRIDGE BRIDGE.

Appropriation	$2,000 00
EXPENDED.	
Amount paid to the Commissioners of the Sinking Funds for the payment of the Cambridge Bridge loan	2,000 00

SINKING FUNDS.

CLAY LANDS.

Appropriation	$5,335 00
EXPENDED.	
Amount paid to the Commissioners of the Sinking Funds for the payment of Clay Lands loan	5,335 00

SINKING FUNDS.

GENERAL.

Appropriation	$117,436 00
EXPENDED.	
Amount paid to the Commissioners of the Sinking Funds for the payment of the City debt	117,436 00

SINKING FUNDS.

HARVARD BRIDGE.

Appropriation	$9,500 00
EXPENDED.	
Amount paid to the Commissioners of the Sinking Funds for the payment of the Harvard Bridge loan	9,500 00

SINKING FUNDS.

IMPROVED SEWERAGE.

Appropriation	$3,372 50
EXPENDED.	
Amount paid to the Commissioners of the Sinking Funds for the payment of the Improved Sewerage loan	3,372 50

STATE AID.

Appropriation			$25,500 00
RECEIVED.			
From the Commonwealth of Massachusetts in reimbursement, in part, of the amount the City has advanced, in conformity to the laws of the State, to volunteers and their families, or other dependents of volunteers of the army and navy :—			
For military aid	$812 11		
State aid	13,360 50		
Burials of soldiers and sailors . .	770 00		
From sundry persons :—			
Aid and board	371 56		
Money uncalled for on pay-rolls .	307 00		
		$15,621 17	
EXPENDED.			
For salary of clerk, Chas. L. Russell .		1,099 99	
Military aid	$1,204 00		
State aid	13,509 00		
Soldiers and sailors' aid . . .	7,521 00		
		22,234 00	
Aid :—			
City of Boston	$23 00		
Town of Lunenburg . . .	43 50		
Town of Spencer	6 00		
Town of Whitman	35 75		
		108 25	
Ambulance, Charles W. Dailey . .		20 00	
Board and care :—			
Batterman Home and Hospital .	$58 57		
Commonwealth of Massachusetts .	80 78		
Medfield Insane Asylum . . .	292 00		
Overseers of the Poor . . .	303 34		
Harriet A. Williams . . .	34 99		
Worcester Insane Asylum . .	165 02		
Worcester Insane Hospital . .	212 17		
		1,146 87	
Burials :—			
C. E. Ahearn	$35 00		
Edwin L. Derby	35 00		
J. J. Kelley & Son	70 00		
H. D. Litchfield	140 00		
C. H. Lockhart	35 00		
Jas. Mullen	35 00		
Roswell, Roles & Co. . . .	35 00		
Shea Bros.	140 00		
Wyeth Bros.	35 00		
		560 00	
Amounts carried forward		$25,169 11	$25,500 00

STATE AID — Concluded.

Amounts brought forward		$25,169 11	$25,500 00
For Car tickets :—			
Boston Elevated Railway Company		15 00	
Fuel :—			
Bay State Fuel Co.	$6 35		
Baker-Hunnewell & Co. . . .	67 50		
Clark Bros.	8 45		
		82 30	
Stationery and printing :—			
Cotton & Gould	$6 75		
Powell & Co.	77 50		
Stationery Department . . .	14 23		
		98 48	
Sundries		7 34	
Supplies, Yerxa & Yerxa . . .		26 50	
Typewriting, Eben W. Pike . .		12 00	
Total			25,410 73
Balance unexpended . . .			$89 27

STATIONERY AND PRINTING.

Appropriation	$3,000 00
Additional appropriation	200 00
	$3,200 00

RECEIVED.

From sundry departments for supplies	$1,134 35

EXPENDED.

For advertising :—			
Press Newspaper Company . .	$66 34		
Sundry persons . . .	12 00		
		78 34	
Binding :—			
Boston Bookbinding Company .	$11 55		
David Farquhar	22 00		
J. H. H. McNamee	78 50		
		112 05	
Postage, F. M. Small . . .		625 00	
Printing :—			
Cambridge Chronicle Company .	$327 77		
Caustic & Claflin	21 00		
J. A. Cummings Printing Company	1,234 08		
J. Frank Facey	25 75		
Press Newspaper Co. . . .	30 00		
The Co-operative Press . . .	117 00		
		1,755 60	
Amounts carried forward		$2,570 99	$3,200 00

STATIONERY AND PRINTING — Concluded.

Amounts brought forward		$2,570 99	$3,200 00
For Stationery and supplies :—			
Cotton & Gould	$488 06		
A. B. Haley	9 00		
E. F. Hunt & Co.	21 80		
Lyon & Patterson	28 75		
J. A. Mundring	9 30		
Chas. H. Thurston	49 50		
Sundry persons	12 16		
		618 57	
Sundries		1 00	
Typewriter supplies		9 00	
Total			3,199 56
Balance unexpended			44

STREET DEPARTMENT.

BRIDGES.

Appropriation			$3,400 00
EXPENDED.			
For salaries of draw tenders :—			
John Gaughan	$782 14		
John F. Powers	834 29		
		$1,616 43	
Laborers, as per pay-rolls		433 11	
Carpenter work, W. Fillmore & Co.		110 33	
Hardware, tools and supplies :—			
Brock Bros.	$9 17		
F. A. White	12 57		
		21 74	
Heating apparatus, Moynahan & Co.		6 60	
Iron work, Miller & Shaw		11 59	
Lumber :—			
John S. Clary	$300 50		
Geo. McQuesten & Co.	259 67		
Wm. H. Wood & Co.	627 39		
		1,187 56	
Sundries		12 10	
Total			3,399 46
Balance unexpended			54

STREET DEPARTMENT.

CLEANING STREETS.

Appropriation			$30,000 00
EXPENDED.			
For labor as per pay-rolls		$24,338 37	
Building at Raymond Street Yard:—			
Brock Bros.	$56 54		
Geo. W. Gale Lumber Company	455 38		
Wm. H. Norris	233 92		
Wm. H. Wood & Co.	122 50		
F. A. White	7 40		
		875 74	
Broom stock, sand and sundries:—			
Boston & Maine Railroad	$37 26		
John Culhane	28 50		
A. M. Loker	50 00		
Sundry persons	2 45		
		118 21	
Hay and grain:—			
J. Cushing & Co.	$1,264 72		
Geo. G. Wright	531 72		
		1,796 44	
Hardware, tools and supplies:—			
American Broom Company	$6 00		
Jos. Breck & Sons	277 29		
E. T. Bynner	25 00		
Menzie's Street Cleaner Company	17 10		
Wm. C. Oastler	49 00		
Sundry persons	10 99		
		385 38	
Lumber, Henry J. Winde		120 64	
Refilling sweeper brooms:—			
Chapman & Soden	$10 00		
Wm. H. Gallison Company	33 04		
Edw. Kendall & Sons	125 00		
Wm C Oastler	8 40		
Wilkens Bros.	145 24		
Peter Woll & Sons	206 05		
Sundry persons	3 03		
		530 76	
Sweeping machine repairs:—			
Barbour-Stockwell & Co.	$51 39		
Boston & Maine Railroad	7 58		
G W. Brady (Charlton M'f'g Co.)	76 58		
Brock Brothers	17 00		
Charles A Claflin & Co.	52 50		
Dodge, Haley & Co.	76 08		
Edson Manufacturing Company	42 89		
Ira G. Hersey	7 87		
A. H Hews & Co.	5 23		
Edward Kendall & Sons	10 58		
Miller & Shaw	28 06		
William C. Oastler	72 31		
Sundry persons	7 52		
		455 59	
Teaming, sundry persons		1,378 51	
Total			29,999 64
Balance unexpended			36

STREET DEPARTMENT.

COLLECTION OF ASHES.

Appropriation	$28,000 00
Transferred from Maintenance	830 00
	$28,830 00

EXPENDED.

For salary of foreman		$824 50	
Labor, as per pay-rolls		23,134 84	
Bicycle repairs and sundries :—			
Brock Bros.	$56 50		
J. L. Moseley	5 00		
		61 50	
Hardware, lumber, paint, oils, etc. :—			
Wadsworth, Howland & Co.	$31 15		
Henry Winde	83 08		
W. H. Wood & Co.	15 00		
Sundry persons	5 65		
		134 88	
Harnesses, repairs, etc. :—			
W. H. Bustin & Son	$87 00		
Jas Forgie & Son	241 50		
F. Ivers & Son	16 00		
Hugh McCaffrey	97 52		
Jos. A. Ryan	21 25		
Viscol Company	6 50		
		469 77	
Hay, grain and straw :—			
Otis S. Brown & Co.	$246 27		
J. Cushing & Co.	1,806 97		
Hosmer, Robinson & Co.	179 14		
Geo. G. Wright	517 96		
		2,744 34	
Horses :—			
P. H. Dardis	$325 00		
M J. Dwyer	170 00		
F. P. Merrill	175 00		
Welch & Hall	190 00		
		860 00	
Horse and wagon covers :—			
Geo T. Hoyt & Co.		108 00	
Lumber and hardware for furnace house :—			
Brock Brothers	$11 01		
Burditt & Bynner	5 84		
John S. Clary	57 60		
George W Gale Lumber Company	27 24		
Jackson & Newton	20 80		
William H. Norris	21 00		
		143 49	
Teaming, sundry persons		348 50	
Total			28,829 82
Balance unexpended			18

STREET DEPARTMENT.

CONSTRUCTION BELMONT STREET.

Appropriation			$9,000 00
EXPENDED.			
For labor, as per pay-rolls		$3,812 20	
Freight and loading gravel:—			
Boston & Maine Railroad	$112 00		
John Byrne	89 00		
Antoni Leonard	30 00		
John McGinness	116 00		
Joshua Stone	191 10		
		538 10	
Hay and grain, J. Cushing & Co.		283 26	
Oil and fuel:—			
Bay State Fuel Company	$150 48		
Standard Oil Company	27 50		
		177 98	
Sidewalk bricks:—			
Eastern Paving Brick Company		118 75	
Stone:—			
S. & R. J. Lombard	$991 79		
Massachusetts Broken Stone Co.	1,126 12		
Richardson & Bacon	22 75		
Sundry persons	422 27		
		2,562 93	
Sundries		8 78	
Teaming, sundry persons		262 86	
Total			7,764 86
Balance unexpended			$1,235 14

STREET DEPARTMENT.

CONSTRUCTION CLARK STREET.

Appropriation			$1,416 65
EXPENDED.			
For labor, as per pay-rolls		$395 27	
Oil, Standard Oil Company		5 13	
Stone:—			
S. & R. J. Lombard	$250 21		
Massachusetts Broken Stone Co.	190 43		
Waltham Trap Rock Company	182 72		
		623 36	
Total			1,023 76
Balance unexpended			$392 89

STREET DEPARTMENT.

CONSTRUCTION GRANITE STREET.

Appropriation			$8,250 00
EXPENDED.			
For labor, as per pay-rolls		$2,167 99	
Freight, gravel and loading :—			
Boston & Maine Railroad	$40 00		
J. F. Elkins	17 51		
Edw. F. Sprague	237 50		
		295 01	
Hay and grain, J. Cushing & Co.		45 90	
Sidewalk bricks :—			
Eastern Paving Brick Company		100 00	
Stone :—			
Boston Elevated Railway Company	$120 75		
S. & R. J. Lombard	787 80		
Massachusetts Broken Stone Co.	139 70		
Waltham Trap Rock Company	104 75		
Sundry persons	738 92		
		1,891 92	
Sundries		43 75	
Teaming, Sundry persons		514 12	
Total			5,058 69
Balance unexpended			$3,191 31

STREET DEPARTMENT.

CONSTRUCTION INMAN COURT.

Appropriation			$634 36
EXPENDED.			
For labor, as per pay-rolls		$50 25	
Stone, Waltham Trap Rock Co.		117 69	
Total			167 94
Balance unexpended			$466 42

STREET DEPARTMENT.

MAINTENANCE.

Appropriation			$75,000 00
Transferred to Street Department Bridges		$900 00	
Transferred to Street Department Collection of Ashes		830 00	
			1,730 00
Amount carried forward			$73,270 00

STREET DEPARTMENT, MAINTENANCE — Continued.

Amount brought forward			$73,270 00
RECEIVED.			
For ashes and scrapings		$316 05	
Barrels		10 34	
Board of horse		441 80	
Dump privilege		204 00	
Horseshoeing		285 35	
Labor and materials		239 46	
Manure		230 00	
Old building		45 00	
Old wheel		17 00	
Permit fees		48 00	
Plank		43 00	
Stone and stone dust		255 50	
Sweeper		10 00	
Use of steam roller		276 00	
		$2,421 50	
EXPENDED.			
For salaries of :—			
Superintendent, Chas. A. Brown	$2,000 00		
Clerks :—			
Geo. M. Clukas	1,460 67		
Imogene B. Hixon	460 75		
Georgie W. Sanborn	271 75		
District foremen :—			
E Osborn	1,181 50		
J. A. Sheridan	1,260 00		
Laborers, as per pay-rolls	35,160 80		
Injured employees paid for lost time	277 00		
		42,072 47	
Asphalt paving repairs :—			
Barber Asphalt Paving Company		1,428 38	
Bituminous pavement :—			
Warren Brothers Company		297 80	
Carriage hire :—			
Whiting & Prescott	$5 00		
G. W. Worster	23 00		
Sundry persons	5 50		
		33 50	
Carriages and wagons, new and repairs :—			
Acme Road Machine Company	$200 00		
Barbour-Stockwell Company	18 30		
Chas. A. Claflin & Co.	6 04		
Ira G. Hersey	21 09		
F. Ivers & Son	185 50		
Edward Kendall & Sons	76 55		
George O. Rollins Company	6 00		
Wadsworth, Howland & Co.	22 43		
Henry J. Winde	257 20		
William H. Wood & Co.	13 67		
Sundry persons	10 60		
		817 38	
Amounts carried forward		$44,649 53	$73,270 00

STREET DEPARTMENT, MAINTENANCE — Continued.

Amounts brought forward		$44,649 53	$73,270 00
For Car tickets :—			
Boston Elevated Railway Company		20 00	
Cash expended for sundries :—			
Charles A. Brown		39 40	
Entertainment of Malden City Council at Riverbank Court		20 75	
Freight, Boston & Maine Railroad		12 62	
Fuel :—			
Baker-Hunnewell Company	$610 00		
Bay State Fuel Company	720 35		
Cambridge Gas Light Co. (coke)	8 71		
Metropolitan Coal Company	391 70		
N. E. Gas and Coke Company	36 73		
		1,767 49	
Gravel :—			
Josephine E. Stone		151 75	
Hardware, tools and repairs, and supplies :—			
Joseph Breck & Sons	$54 00		
Brock Brothers	37 89		
Burditt & Bynner	4 30		
Burditt & Williams	9 05		
E. T. Bynner	32 45		
Charles A. Claflin & Co.	5 43		
Dodge, Haley & Co.	533 24		
Daniel J. Sullivan	38 20		
F. A. White	62 57		
		777 13	
Harness, new and repairs, and horse clothing :—			
James Forgie & Son	$750 42		
John H. Fuller	55 20		
F. Ivers & Son	126 40		
Hugh McCaffrey	324 14		
Jos. A. Ryan	54 70		
Viscol Company	25 50		
		1,336 36	
Hay, grain, straw, etc. :—			
J. Cushing & Co.	$5,261 88		
L. G. Stone	60 00		
Geo. G. Wright	778 46		
		6,100 34	
Horses :—			
P. H. Dardis	$325 00		
Welch & Hall Company	1,900 00		
		2,225 00	
Horse clipping, Ferris & Co.		6 00	
Amounts carried forward		$57,106 37	$73,270 00

STREET DEPARTMENT, MAINTENANCE — Continued.

Amounts brought forward		$57,106 37	$73,270 00
For Horseshoeing stock :—			
Bradlee, Hastings & Co.	$11 19		
Dodge, Haley & Co.	428 02		
James Forgie & Son	22 10		
		461 31	
Lighting :—			
Cambridge Electric Light Company		370 18	
Lowering flag-staff, H. H. Brandt		6 50	
Office expenses :—			
Advertising and printing :—			
Press Newspaper Company	$13 08		
Directories :—			
E. F. Hunt & Co.	9 00		
Sampson, Murdock & Co.	5 00		
Furniture, The Globe-Wernicke Co.	18 75		
Stationery, printing, etc. :—			
Cambridge Chronicle Company	133 00		
Cotton & Gould	121 15		
J. A. Cummings Printing Co.	44 87		
Stationery Department	72 49		
Sundries	14 75		
Telephone rent and tolls	231 00		
		663 09	
Oils, paints, etc. :—			
E. T. Bynner	$39 17		
Central Manufacturing Company	18 53		
Chas. A. Claflin & Co.	49 77		
W. A. Morrison	53 95		
Standard Oil Company	62 88		
Wadsworth, Howland & Co.	8 03		
		232 33	
Repairs on house set on fire by steam roller :—			
Lumber, plaster work, etc. :—			
Geo. W. Gale Lumber Co.	$53 91		
Wm. J. Heron & Co.	6 10		
Jackson & Newton	2 00		
		62 01	
Repairing scales, The Fairbanks Co.		43 05	
Sealing scales :—			
Sealer of Weights and Measures		8 87	
Stable repairs :—			
Basins, Joseph Breck & Sons	$15 49		
Basins' valves, W. A. Snow & Co.	8 40		
Amounts carried forward	$23 89	$58,953 71	$73,270 00

STREET DEPARTMENT, MAINTENANCE — Continued.

Amounts brought forward	$23 89	$58,953 71	$73,270 00
For Stable repairs :—			
Hardware and supplies :—			
Brock Brothers	63 06		
Burditt & Williams	4 25		
E. T. Bynner	8 63		
F. A. White	10 50		
Heating apparatus, etc. :—			
Moynahan & Co.	40 42		
Labor and materials :—			
Water Works Department	51 46		
Lumber :—			
John S. Clary	439 39		
Geo W. Gale Lumber Company	121 70		
Wm. H. Wood & Co.	59 54		
Mill work, Ira G. Hersey	6 38		
Repairing asphalt, Simpson Bros.	10 00		
Repairing roof, H. F. Peak	92 33		
Sundries	4 31		
		935 86	
Stable supplies :—			
Axle grease, Standard Oil Co.	$20 45		
Bricks, Charles W. Sabin	30 10		
Chemicals, etc. :—			
Walter A. Claflin	2 15		
The E. L. Patch Company	39 75		
The "Sanitas" Company	61 50		
Feed bags, Jos. Breck & Sons	29 17		
Horse blankets, Jas. Forgie & Son	44 50		
Hose, Boston Woven Hose Co.	21 86		
Lamps, General Electric Company	21 00		
Rope, Harrington, King & Co.	12 91		
Soap, camphor, etc. :—			
William B. Hunt & Co.	20 95		
Sponges :—			
Burditt & Bynner	36 56		
E. T. Bynner	59 21		
E. and F. King & Co.	26 00		
Supplies, hardware, etc. :—			
E. T. Bynner	37 51		
A. C. Curtis	18 70		
F. P. Merrill	64 01		
Useful Novelty Company	14 40		
F. A. White	55 32		
Sundry persons	6 25		
		622 30	
Amounts carried forward		$60,511 87	$73,270 00

STREET DEPARTMENT, MAINTENANCE — Concluded.

Amounts brought forward		$60,511 87	$73,270 00
Steam roller repairs and supplies :—			
Barbour-Stockwell Company	$200 76		
Boston & Maine Railroad	29 39		
Boston Woven Hose Company	5 90		
Brock Bros.	7 16		
Chas. A. Claflin & Co.	87 82		
Wm. H. Gallison Company	57 65		
Fred. C. Gifford	82 45		
Harrisburg Foundry & Machine Co.	23 50		
A. H. Hews & Co	163 89		
The O. S. Kelly Company	331 50		
Edw. Kendall and Sons	126 28		
Miller & Shaw	167 50		
Wm. C. Oastler	310 50		
Whittier Machine Company	436 82		
Sundry persons	13 75		
		2,044 87	
Stone crusher repairs and supplies :—			
Barbour-Stockwell Company	$29 23		
Bay State Belting Company	7 00		
Boston Belting Company	5 55		
Boston & Maine Railroad	7 96		
John B Byrne	8 65		
Farrell Foundry & Machine Co.	77 55		
F. E Fitts Mf'g & Supply Co.	56 75		
A. H. Hews & Co.	35 64		
J. H. Houghton	19 60		
Edw. Kendall & Sons	50 12		
Miller & Shaw	52 68		
Steele & Condict	73 00		
Taylor Iron & Steel Company	701 69		
A. J. Wellington	12 00		
Sundry persons	12 86		
		1,150 28	
Stone :—			
Massachusetts Broken Stone Co.	$145 02		
William B. Mullen	22 09		
Sundry persons	8,309 70		
Testing stone. (field stone) Lionel S. Marks	20 00		
		8,496 81	
Street signs :—			
George W. Gale Lumber Company	$54 45		
F. A. White (gold leaf)	24 65		
		79 10	
Sundries		1 87	
Teaming, sundry persons		978 05	
Work on flag staff, M. J. Connelly		6 32	
Total			73,269 17
Balance unexpended			83

STREET DEPARTMENT.

PAVING, EDGESTONES AND SIDEWALKS.

Appropriation			$25,000 00
RECEIVED.			
For edgestone and sidewalk assessments		$13,516 14	
Labor and materials		649 60	
		$14,165 74	
EXPENDED.			
For labor, as per pay rolls . . .		$8,841 56	
Artificial stone sidewalks :—			
Thomas J. Hind	$46 54		
Simpson Brothers	969 29		
		1,015 83	
Bricks :—			
Eastern Paving Brick Company .	$3,881 88		
M. W. Sands	195 00		
		4,076 88	
Edgestones, S & R. J. Lombard .		7,490 70	
Gravel, freight and loading :—			
Boston & Maine Railroad . .	$648 00		
John F. Elkins	29 00		
Antoni Leonard	257 10		
		934 10	
Gutter stone :—			
Boston Elevated Railway Company		623 20	
Hardware, tools, etc. :—			
Joseph Breck & Sons . . .	$83 23		
E. T. Bynner	69 20		
Dodge, Haley & Co. . . .	46 61		
Bruce R. Ware & Co. . . .	11 10		
Sundry persons	5 00		
		215 14	
Hay and grain, J. Cushing & Co. .		157 08	
Lanterns, oil, lumber & sundries :—			
George W. Gale Lumber Company	$73 90		
Geo W. Jones	5 50		
Standard Oil Company . . .	60 14		
Union Glass Company . . .	112 05		
		251 59	
Teaming, sundry persons . . .		1,393 82	
Total			24,999 90
Balance unexpended			10

STREET DEPARTMENT.

REBUILDING BRIDGE STREET.

Appropriation			$20,000 00
Unexpended balances of street railway tax accounts transferred to this appropriation			40 86
			$20,040 86

EXPENDED.

For labor, as per pay rolls		$5,752 20	
Edgestones and flagging :—			
S. & R. J. Lombard		411 26	
Granite paving blocks :—			
S. & R. J. Lombard		9,824 04	
Gravel, freight and loading :—			
Boston & Maine railroad	$616 00		
Antoni Leonard	129 00		
William B. Mullen	14 00		
		759 00	
Hardware, tools, etc. :—			
Joseph Breck & Sons	$60 00		
E. T. Bynner	19 61		
Dodge, Haley & Co.	25 60		
		105 21	
Hay and grain, J. Cushing & Co.		270 41	
Oil and cement :—			
Bryant & Kent	$50 70		
Standard Oil Company	19 99		
		70 69	
Sidewalk bricks :—			
Eastern Paving Brick Company		118 75	
Teaming, sundry persons		684 98	
Total			17,996 54
Balance unexpended			$2,044 32

STREET DEPARTMENT.

REBUILDING BROADWAY.

Appropriation	$10,000 00
Transferred to Bridge Street	18 92
	$9,981 08

STREET DEPARTMENT, REBUILDING BROADWAY — Concluded.

Amount brought forward			$9,981 08
EXPENDED.			
For labor, as per pay-rolls		$3,140 28	
Edgestones and flagging :—			
S. & R. J. Lombard		861 28	
Granite paving blocks :—			
Chas. McMahon		5,178 44	
Gravel, freight, loading and carting :—			
Boston & Maine Railroad	$288 00		
J. F. Elkins	204 60		
Antoni Leonard	111 00		
		603 60	
Hay and grain, J. Cushing & Co.		109 92	
Oil, Standard Oil Company		17 50	
Teaming, sundry persons		70 06	
Total			$9,981 08

STREET DEPARTMENT.

REBUILDING BROOKLINE STREET.

Appropriation			$5,000 00
Transferred to Bridge Street			5 53
			$4,994 47
EXPENDED.			
For labor, as per pay-rolls		$2,021 35	
Blocks (vitrified) :—			
Eastern Paving Brick Company	$1,525 00		
Higley, Keplinger & Co.	417 20		
		1,942 20	
Cement, Byrant & Kent		513 77	
Concrete gravel stone :—			
Wm. B. Mullen		229 37	
Edgestones, S. & R. J. Lombard		73 82	
Hay and Grain, J. Cushing & Co.		91 80	
Hardware, Lumber and tools :—			
E. T. Bynner	$48 05		
Geo. W. Gale Lumber Company	2 35		
		50 40	
Road pitch, oil and sand :—			
Antoni Leonard	$12 00		
N. E. Felt roofing works	47 26		
Standard Oil Company	12 50		
		71 76	
Total			$4,994 47

STREET DEPARTMENT.

REBUILDING CROSSINGS, ETC.

Appropriation			$10,000 00
Transferred to Bridge Street			52
			$9,999 48
EXPENDED.			
For labor, as per pay-rolls		$7,054 58	
Artificial stone side-walk repairs :—			
Simpson Bros.		205 17	
Bricks, Eastern Paving Brick Co.		675 00	
Cement, Bryant & Kent		132 45	
Granite flagging :—			
S. & R. J. Lombard	$87 11		
Wm. J. McCarthy	74 42		
		161 53	
Gravel, freight and loading :—			
Boston & Maine Railroad	$160 00		
Antoni Leonard	12 00		
John McGuiness	3 00		
Jeremiah Sullivan	95 00		
		270 00	
Hay and grain, J. Cushing & Co.		170 28	
Lumber, oil, tools, etc. :—			
E. T. Bynner	$26 05		
Geo. W. Gale Lumber Company	2 87		
Standard Oil Company	5 64		
		34 56	
Re-cutting granite paving blocks :—			
Thos. Walsh		609 93	
Teaming, sundry persons		98 98	
Vitrified paving-blocks :—			
Ferris Brick Company	$214 50		
Alfred E. Hughes	125 00		
Mack Manufacturing Company	247 50		
		587 00	
Total			$9,999 48

STREET DEPARTMENT.

REBUILDING HARVARD SQUARE.

Appropriation			$8,110 19
EXPENDED.			
For labor, as per pay-rolls,		$3,113 33	
Blocks (vitrified) :—			
Higley, Keplinger & Co.		2,875 35	
Amounts carried forward		$5,988 68	$8,110 19

STREET DEPARTMENT, REBUILDING HARVARD SQUARE — Concluded.

Amounts brought forward		$5,988 68	$8,110 19
For Cement, Bryant & Kent		708 63	
Concrete gravel stone, Wm. B. Mullen		417 28	
Edgestone, S. & R. J. Lombard		33 29	
Gravel, freight and loading :—			
Boston & Maine Railroad	$72 00		
J. F. Elkins	46 02		
		118 02	
Lumber, road-pitch, etc. :—			
John S. Clary	$15 32		
George W. Gale Lumber Company	4 24		
Edward Kendall & Sons	2 41		
N. E. Felt Roofing Works	33 13		
		55 10	
Teaming, sundry persons		423 00	
Total			7,744 00
Balance unexpended			$366 19

STREET DEPARTMENT.

REBUILDING MASSACHUSETTS AVENUE, FROM RAILROAD CROSSING TO HARVARD BRIDGE.

Appropriation			$26,000 00
Transferred to Bridge Street			12 01
			$25,987 99

EXPENDED.

For labor, as per pay-rolls		$9,400 33	
Blocks (vitrified) :—			
Eastern Paving Brick Company	$325 00		
Higley, Keplinger & Co.	10,278 75		
Alfred E. Hughes	50 00		
		10,653 75	
Cement, Bryant & Kent		2,358 36	
Concrete gravel stone, Wm. B. Mullen		1,288 58	
Edgestone and flagging :—			
S. & R J. Lombard		327 14	
Gravel, freight and loading :—			
Boston & Maine Railroad	$360 00		
Bryant & Kent	4 25		
Antoni Leonard	159 15		
		523 40	
Hardware, tools, etc. :—			
Joseph Breck & Sons	$117 14		
Brock Brothers	7 19		
		124 33	
Hay and grain, J. Cushing & Co.		233 31	
Amounts carried forward		$24,909 20	$25,987 99

STREET DEPARTMENT — Concluded.

Amounts brought forward . .		$24,909 20	$25,987 99
For Lumber, oil, etc. :—			
Brock Brothers	$60 00		
George W. Gale Lumber Company	89 22		
Standard Oil Company . . .	47 25		
William H. Wood & Co. . . .	8 09		
		204 56	
Road pitch, N. E. Felt Roofing Works		157 83	
Teaming, sundry persons . . .		716 40	
Total			$25,987 99

STREET DEPARTMENT.

REBUILDING MT. AUBURN STREET.

Appropriation	$10,000 00
Transferred to Bridge Street	3 88
	$9,996 12

EXPENDED.

For labor, as per pay-rolls . . .		$3,687 72	
Carting cracked stone, J. F. Elkins .		779 49	
Cement :—			
Atlantic Supply Company . .	$36 25		
Bryant & Kent	16 35		
		52 60	
Concrete gravel stone, Wm. B. Mullen		6 91	
Fuel, Bay State Fuel Company . .		79 58	
Gravel, freight and loading :—			
Boston & Maine Railroad . .	$40 00		
Antoni Leonard	19 50		
		59 50	
Hay and grain, J. Cushing & Co. .		213 78	
Oil, Standard Oil Company . .		34 15	
Sidewalk bricks :—			
Eastern Paving Brick Company .		81 25	
Stone :—			
S. & R. J. Lombard . . .	$166 12		
Massachusetts Broken Stone Co. .	4,223 98		
Richardson & Bacon . . .	143 54		
		4,533 64	
Teaming, sundry persons . . .		305 00	
Vitrified paving blocks :—			
Eastern Paving Brick Co. . .		162 50	
Total			$9,996 12

STREET DEPARTMENT.

WATERING.

Appropriation		$26,000 00
Transferred from Contingent Fund		683 84
		$26,683 84

RECEIVED.

For assessments	$15,965 36
Collections	1,460 27
	$17,425 63

EXPENDED.

For salary of foreman		$950 25	
Clerical assistance		125 00	
Laborers, as per pay rolls		1,474 76	
Bicycle repairs, J. L. Moseley		20 30	
Binding books, David Farquhar		7 50	
Hardware, iron, etc. :—			
Barbour-Stockwell Company	$4 59		
Brock Brothers	20 40		
Dodge, Haley & Co.	147 57		
Moynahan & Co.	5 45		
F. A. White	2 47		
		180 48	
Hose, etc. :—			
Boston Woven Hose Company		83 78	
Labor and materials :—			
Water Works Department		162 91	
Lumber, mill work, etc. :—			
George W. Gale Lumber Company	$14 56		
Ira G. Hersey	36 33		
Henry J. Winde	280 00		
		330 89	
Paints, oil, varnish, etc. :—			
Burditt & Bynner	$37 17		
Murphy Varnish Company	234 25		
Wadsworth, Howland & Co.	138 17		
		409 59	
Springs, Duff Spring Company		217 98	
Sprinkling streets, as per contracts		21,858 10	
Stationery and printing :—			
Cambridge Chronicle Company	$5 00		
Cotton & Gould	42 25		
		47 25	
Tanks, attachments, etc. :—			
American Stave and Cooperage Co.	$267 00		
J. L. & H. K. Potter	512 95		
Charles Waugh & Co.	10 10		
		790 05	
Use of water :—			
Boston Packing and Provision Co.		25 00	
Total			$26,683 84

TREASURY DEPARTMENT.

Appropriation		$16,000 00
Transferred to Contingent Fund		400 00
		$15,600 00

RECEIVED.

For fees from sundry persons	$2,661 74	

EXPENDED.

For salaries of :—			
City Treasurer, Wm. W. Dallinger	$3,000 00		
Clerks :—			
E. G Stevens	1,565 00		
E. J. Howlett	1,252 00		
J. H. Webber	1,252 00		
C. H. Dodge	939 00		
E. E. Estes	767 50		
P. B. Dallinger	730 33		
Temporary clerks	977 93		
		10,483 76	
Advertising, Press Newspaper Co.		78 08	
Carriage hire, M. J. Fairbanks		474 50	
Commissions for collecting taxes :—			
Jas. A. Brown	$149 91		
John Foster	178 14		
Joseph Fox	659 75		
Warren Ivers	882 11		
		1,869 91	
Directories :—			
Sampson, Murdock & Co.	$5 00		
Sundry persons	6 00		
		11 00	
Official bond, Wm. A. Muller		160 00	
Postage, F. M. Small		1,659 70	
Protectograph, Lively & Russell		30 00	
Recording deeds, E. O. Childs		37 35	
Revenue stamps		5 50	
Stationery, printing, etc. :—			
Carter, Rice & Co.	$27 06		
Wm. H. Claflin & Co.	28 50		
Cotton & Gould	156 37		
J. A. Cummings Printing Company	10 57		
J. Frank Facey	16 75		
John H. Ford	326 75		
Stationery Department	38 65		
Times Publishing Co.	14 25		
John Wilson & Son	10 00		
		628 90	
Stamps, etc. :—			
Boston Stencil & Stamp Works		13 05	
Subscription, Geo. E. French		6 00	
Sundries		8 78	
Telephone rent and tolls		129 52	
Total			15,596 05
Balance unexpended			$3 95

WATER WORKS DEPARTMENT.

CONSTRUCTION.

Appropriation			$46,000 00
RECEIVED.			
For abatement		$76 38	
Old pipe		15 01	
Premium on bonds		1,530 00	
		$1,621 39	
EXPENDED.			
For labor, as per pay-rolls		6,934 32	
Advertising and printing:—			
Press Newspaper Company		6 84	
Appraisal and report of damage:—			
S. S. Gleason	$200 00		
J. L. Nason & Co.	150 00		
		350 00	
Brick, lime and cement, G. F. Frost		96 39	
Boots, American Rubber Company		16 68	
Damages, Bridget Conway		50 00	
Dynamite, fuse, etc.:—			
Massachusetts Broken Stone Co.		15 25	
Examining title, Clarence F. French		25 00	
Expressage, Dodge Express Co.		27 56	
Frames, covers, gates, etc.:—			
Barbour-Stockwell Company	$374 15		
Chapman Valve Manufacturing Co.	961 20		
		1,335 35	
Heating apparatus, Fred H. Kirwin		364 60	
Hardware, tools, etc.:—			
Harold L. Bond & Co.	$80 79		
Joseph Breck & Sons	11 50		
E. T. Bynner	7 50		
		99 79	
Land and damages:—			
Charles F. Smith	$965 00		
Trustees of Payson Park Land Co.	1,585 00		
		2,550 00	
Labor and materials:—			
Street Department		198 32	
Laying drains, John M. Riley		1,627 28	
Lead, Waite, Ranlet & Co.		910 86	
Lumber and cement:—			
Geo. J. Barber Lumber Company	$25 15		
Geo. W. Gale Lumber Company	528 58		
E. D. Sawyer & Co.	118 04		
Wm. H. Wood & Co.	14 64		
		686 41	
Amounts carried forward		$15,294 65	$46,000 00

WATER WORKS DEPARTMENT, CONSTRUCTION — Concluded.

Amounts brought forward		$15,294 65	$46,000 00
For Meters, boxes, etc. :—			
Barbour-Stockwell Company	$85 25		
E. W. Boynton	145 16		
Hersey Manufacturing Company	8,546 72		
Neptune Meter Company	1,069 48		
		9,846 61	
Paving blocks, S. & R. J. Lombard		14 00	
Pipe, fittings, etc. :—			
Davis & Farnum	$21 14		
D. W. Lewis	169 99		
A. P. Smith Manufacturing Co.	124 00		
U. S. Cast Iron Pipe & Foundry Co.	3,021 11		
Walworth Manufacturing Co.	1,473 10		
		4,809 34	
Plumbing :—			
Levi Hawkes	$13 41		
Fred. H. Kirwin	93 27		
		106 68	
Putting in drain, Arthur L. Hersum		30 00	
Printing, Cambridge Chronicle Co.		20 00	
Professional services :—			
A. Greenwood, M.D.		40 00	
Repairing cess-pools, etc. :—			
Jas. E. Burke	$318 00		
C. L. Keefe	13 40		
		331 40	
Sanitary protection :—			
Geo. W. Thompson		9 90	
Services of engineers :—			
French & Bryant		55 48	
Services of experts in Evans Case :—			
Ernest W. Bowditch	$296 74		
A. H. Jewett	52 00		
E. P. Smith	100 00		
		448 74	
Services of City Solicitor, Law Dept.		500 00	
Stenography and typewriting :—			
Nellie Burrows	$15 75		
Miss F. C. Lewis	13 00		
Wm. B. Wright	65 28		
		94 03	
Sundries		13 27	
Teaming, sundry persons		83 41	
Wagons and repairs :—			
Charles Waugh & Co.		501 20	
Total			32,198 71
Balance unexpended			$13,801 29

WATER WORKS.

MAINTENANCE, GENERAL ACCOUNT.

Appropriation	$81,000 00
Transferred to Water Works, Ice for Drinking Fountains	500 00
	$80,500 00

RECEIVED.

For barrels	$2 50
Grass	435 50
Hay	14 13
Labor and materials	88 25
Junk	367 87
Overcharge	50
Pipe	19 14
Plants	1,499 01
Rates, fines, etc.	327,722 48
Supplies	5,197 74
	$335,347 12

EXPENDED.

For General Account:—			
Salaries of:—			
Superintendent, E. C. Brooks	$2,340 00		
Assistant Sup't, Chas. B. Parker	1,500 00		
Treasurer of Water Loan Sinking Fund, Wm. W. Dallinger	200 00		
Inspectors:—			
F. G. Davis	1,000 00		
C. E. McGuire	777 50		
Machinist, I. H. Henderson	880 34		
Mechanic, B. P. Doe,	1,042 86		
Time keeper, F. W. Cone	939 00		
Laborers, as per pay rolls,	11,660 46		
		20,340 16	
Advertising and printing:—			
Cambridge Chronicle Company	$6 50		
F. S. Hill	6 50		
Sundry persons	4 68		
Times Publishing Company	6 50		
		24 18	
Blackite, Robert W. Neff		6 00	
Bricks, N. M. Cofran & Co.		6 05	
Carpentry:—			
E. W. Boynton	$49 04		
S. J. Kelley	10 45		
		59 49	
Carriage and wagon repairs:—			
Hugh Stewart & Co.	$91 10		
Chas. Waugh & Co.	216 70		
		307 80	
Amounts carried forward		$20,743 68	$80,500 00

WATER WORKS, MAINTENANCE, GENERAL ACCOUNT — Continued.

Amounts brought forward		$20,743 68	$80,500 00
For Car tickets :—			
Boston Elevated Railway Company	$175 00		
Boston & Maine Railroad	10 80		
		185 80	
Clearing snow off Artificial Pond :—			
Boston Packing & Provision Co.		25 00	
Damages, Jas. J. McGonigle		75 00	
Drain work on Fayette Street		27 50	
Expressage :—			
Dodge Express Company	$25 25		
Hatch & Co.	6 35		
Sundry persons	4 55		
		36 15	
Frames, Vickery & Co.		7 50	
Fuel, Coleman Bros.		42 00	
Glazing, J. L. P. Ackers		6 29	
Hardware, tools, machinery and repairs :—			
Harold L. Bond & Co.	$6 25		
Jos. Breck & Sons	57 30		
Burditt & Bynner	18 51		
E. T. Bynner	64 78		
Chandler & Farquhar	40 69		
Dodge, Haley & Co.	21 34		
Henry F. Jenks	6 00		
Jas. Maitland	158 45		
Miller & Shaw	11 80		
The A. P. Smith Manufacturing Co.	10 00		
F. A White	16 69		
Sundry persons	14 42		
		426 23	
Harness, repairs, horse clothing, etc. :—			
M. Cavanagh	$126 85		
L. C. Chase & Co.	9 00		
		135 85	
Hay, grain, etc., J. Cushing & Co.		668 09	
Horseshoeing :—			
Wm. Balmer	$77 00		
John F. Gurry & Sons	51 00		
Thomas Smith	262 75		
		390 75	
Hose, packing and rubber goods :—			
Boston Woven Hose & Rubber Co.	$20 09		
Charles Carr	5 00		
		25 09	
Ice, Fresh Pond Ice Company		258 67	
Inspections :—			
Cigars :—			
Holderer & Macdonald	$12 25		
Peter Le Francis & Sons	9 00		
Amounts carried forward	$21 25	$23,053 60	$80,500 00

WATER WORKS, MAINTENANCE, GENERAL ACCOUNT — Continued.

Amounts brought forward . . .	$21 25	$23,053 60	$80,500 00
For inspections :—			
Car fares :—			
Boston & Maine Railroad . .	16 00		
Dinners :—			
Woodland Park Hotel . . .	101 50		
Services of orchestra :—			
Daggett's Orchestra . . .	25 00		
Special cars :—			
Boston Elevated Railway Co. .	8 00		
Wellesley & Boston Street Ry. .	4 00		
		175 75	
Leather bag, W. W. Winship . .		5 50	
Labor and materials :—			
Street Department		20 67	
Lighting :—			
Cambridge Gas Light Company .		9 50	
Lumber and cement :—			
George W. Gale Lumber Company	$41 53		
E. D. Sawyer & Co. . . .	9 28		
William H. Wood & Co. . .	6 75		
		57 56	
Mason work, William Crane . .		21 45	
Meters and repairs :—			
Hersey Manufacturing Company .	$49 48		
Neptune Meter Company . .	44 66		
Thomson Meter Company . .	13 44		
Union Water Meter Company .	136 00		
		243 58	
Motor Service :—			
Cambridge Electric Light Company		62 26	
Oil, Standard Oil Company . .		21 15	
Payments in accordance with Acts of 1893, Chapter 352 :—			
City of Waltham	$1,037 32		
Town of Belmont	546 34		
Town of Lexington . .	359 70		
Town of Lincoln	219 70		
Town of Weston	124 60		
		2,287 66	
Pipe, fittings, etc. :—			
Peter Barclay Manufacturing Co. .	$5 65		
Geo. F. Blake Manufacturing Co. .	17 86		
Chapman Valve Manufacturing Co.	53 34		
Coffin Valve Company . . .	6 00		
Davis & Farnum Manufacturing Co.	98 83		
Ross Valve Company . . .	12 50		
Walworth Manufacturing Co. .	59 29		
Sundry persons	9 24		
		262 71	
Amounts carried forward .		$26,221 39	$80,500 00

WATER WORKS, MAINTENANCE, GENERAL ACCOUNT — Continued.

Amounts brought forward		$26,221 39	$80,500 00
For Plumbing, Arthur W. Balcom .		6 00	
Rebuilding chimneys, Oliver P. Greenleaf		25 01	
Rent, public property . . .		1,200 00	
Rent of box, Cambridge Trust Co. .		20 00	
Repairing leak, Miller & Ellis .		45 87	
Repairing fountains :—			
J. L. Mott Iron Works . . .	$17 13		
Chas. A. Sawyer	8 00		
		25 13	
Salt hay, Richard Finnick . . .		19 90	
Seed meal, L. G. Stone . . .		7 50	
Services as electrical expert, Chas. H. Morse		200 00	
Stationery, printing and typewriter supplies :—			
Cambridge Chronicle Company .	$23 50		
Cotton & Gould	58 50		
J. A. Cummings Printing Company	28 99		
Thorp & Martin Company . .	135 99		
Sundry persons	6 00		
		252 98	
Subscriptions :—			
Engineering News	$5 00		
Sundry persons	3 00		
		8 00	
Sundries		46 72	
Supplies, J. A. Holmes & Co. . .		5 28	
Teaming, sundry persons . . .		29 50	
Telephone rent and tolls . . .		196 17	
Testing water-pipes :—			
Walter E. Hadley	$30 00		
Currier Lang	30 00		
		60 00	
Use of horse and wagon :—			
Ralph Smith & Co.	$13 50		
Whiting & Prescott . . .	16 50		
		30 00	
Total expenses, General Account . .		$28,399 45	
Amount carried forward . . .			$80,500 00

WATER WORKS, MAINTENANCE, GENERAL ACCOUNT — Continued.

Amount brought forward			$80,500 00
For office expenses :—			
Salaries :—			
Water Registrar, W. H. Harding		$2,700 00	
Clerks :—			
G. K. Dame	$626 00		
H. L. Lincoln	1,200 00		
H. F. Milligan	782 50		
M. M. Robbins	626 00		
		3,234 50	
Card cabinet :—			
Yawman & Erbe Manufacturing Company		12 38	
Car tickets :—			
Boston Elevated Railway Co.		75 00	
Directories :—			
E. F. Hunt & Co.	$3 00		
Sampson, Murdock & Co.	5 00		
		8 00	
Furniture, The Globe-Wernicke Co.		24 00	
Stationery and printing :—			
Cambridge Chronicle Company	$112 14		
Thorp & Martin Company	307 10		
		419 24	
Subscription, Geo. E. French		6 00	
Sundries		2 75	
Total Office Expenses		$6,481 87	
For Pumping Station :—			
Salaries :—			
Engineer, E. I. Harris	$1,800 00		
Assistant Engineer, W. H. Blaisdell	1,042 86		
Laborers, as per pay-rolls	5,205 72		
		8,048 58	
Carpentry, E. W. Boynton		11 86	
Cash expended for sundries		10 85	
Electrical supplies :—			
Pettingell Andrews Company		27 09	
Engine and boiler supplies :—			
George F. Blake Manufacturing Co.	$204 82		
A. W. Chesterton & Co.	82 85		
The Fairbanks Company	7 25		
Grundy Brass Works	33 52		
Keystone Lubricating Company	89 88		
The Mason Regulator Company	18 65		
William B. Pierce Company	75 00		
The Alden Speare's Sons Company	90 62		
W. A. Wood & Co.	84 76		
Sundry persons	8 46		
		695 81	
Amounts carried forward		$8,794 19	$80,500 00

WATER WORKS, MAINTENANCE, GENERAL ACCOUNT — Continued.

Amounts brought forward		$8,794 19	$80,500 00
For Expressage :—			
Hatch & Co.	$23 46		
Sundry persons	3 10		
		26 56	
Fuel :—			
Baker-Hunnewell Company	$29 50		
Coleman Brothers	5,293 35		
		5,322 85	
Hardware, tools, repairs and supplies :—			
Burditt & Bynner	$7 38		
E. T. Bynner	33 26		
Chandler & Farquhar	17 72		
Dodge, Haley & Co.	13 57		
Walworth Manufacturing Co.	16 87		
Jas. H. Wyeth & Co.	6 25		
A. J. Wilkinson & Co.	5 11		
Sundry persons	7 23		
		107 39	
Hose, etc., Boston Woven Hose Co.		36 07	
Ice, Fresh Pond Ice Company		49 80	
Lumber, Geo. W. Gale Lumber Co.		27 19	
Magnesia coverings, etc. :—			
S. C. Nightingale & Childs	$13 64		
C. W. Trainer Manufacturing Co.	5 00		
		18 64	
Oil, paints, etc. :—			
Heath & Milligan Manufacturing Co.	$26 81		
Standard Oil Company	27 83		
A. W. Strauss & Co.	8 50		
W. A. Wood & Co.	126 03		
		189 17	
Painting and glazing :—			
J. L. P. Ackers	$21 53		
Lougee & Co.	297 98		
		319 51	
Plating, Bay State Nickel Plate Works		6 25	
Plumbing, Levi Hawkes		33 65	
Polish, The Butcher Polish Co.		5 30	
Repairing wheelbarrow :—			
Wm. Campbell & Co.		11 50	
Sundries		14 81	
Telephone rent and tolls		108 66	
Total expenses, Pumping Station		$15,071 54	
For Fresh Pond Reservoir :—			
Labor, as per pay rolls		$13,589 25	
Bicycle repairs :—			
Boston Woven Hose Company		5 10	
Amounts carried forward		$13,594 35	$80,500 00

WATER WORKS, MAINTENANCE, GENERAL ACCOUNT — Continued.

Amounts brought forward		$13,594 35	$80,500 00
For Building wall, John F. Quinn.		245 00	
Burlap and twine, James Baker		7 62	
Cases, J. H. Corcoran & Co.		7 00	
Damages, Town of Belmont		200 00	
Expressage :—			
Brooks Express	$11 70		
Sundry persons	4 25		
		15 95	
Hardware, tools and repairs :—			
Joseph Breck & Sons	$22 10		
E. T. Bynner	8 73		
James Maitland	10 87		
		41 70	
Hay, grain, etc., J. Cushing & Co.		28 38	
Horseshoeing, Street Department		11 40	
Lumber :—			
George W. Gale Lumber Company	$16 38		
W. H Wood & Co.	6 16		
		22 54	
Plants, Shady Hill Nursery Company		29 00	
Packing, J. Woodward Manning		6 30	
Painting and glazing, Lougee & Co.		33 19	
Powder, Joseph Breck & Sons		6 50	
Services of engineers :—			
French & Bryant		13 53	
Services of landscape architects :—			
Olmsted Brothers		1,355 11	
Stone, Waltham Trap Rock Co.		171 42	
Sundries		16 51	
Teaming,s undry persons		4,657 80	
Wagon repairs, Joseph E. Bonin		8 30	
Total expenses, Fresh Pond Reservoir		$20,471 60	
For Hobbs Brook Reservoir :—			
Salaries :—			
Keeper, J. E Bryant	$730 00		
Labor, as per pay rolls	277 61		
		$1,007 61	
Cleaning cess-pools, J. Totten & Sons		10 00	
Hardware, tools and supplies :—			
J. A. Higgins		21 04	
Hay, grain, etc., Geo. B. Pope & Co.		90 52	
Harness and repairs, Peter Perry		21 10	
Horseshoeing, F. G. Helm		22 45	
Amounts carried forward		$1,172 72	$80,500 00

WATER WORKS, MAINTENANCE, GENERAL ACCOUNT — Continued.

Amounts brought forward		$1,172 72	$80,500 00
Painting, whitening, etc. :—			
Lally Patent Column Company	$10 00		
C. W. Norton & Co.	175 00		
		185 00	
Professional services :—			
A. Greenwood, M. D.		200 00	
Sundries		16 46	
Telephone rent and tolls		63 40	
Total expenses, Hobbs Brook Reservoir		$1,637 58	
For Payson Park Reservoir :—			
Labor, as per pay-rolls		$790 00	
Electrical work, F. Bryant & Co.		16 66	
Fuel :—			
Osgood & Wendell	$6 25		
Richardson & Bacon	6 00		
		12 25	
Sundries		63	
Total expenses, Payson Park Reservoir		$819 54	
For Stony Brook Reservoir :—			
Salary of gateman, Silas Baxter		$880 34	
Labor, as per pay rolls		551 16	
Carting hay, Geo. W. Thompson		13 00	
Cleaning cess-pools :—			
George W. Thompson	$46 51		
J. Totten & Sons	325 50		
		372 01	
Fuel, G. F. Frost		27 50	
Hardware, tools and supplies :—			
J. A. Higgins		21 91	
Harness and repairs, Peter Perry		20 90	
Hay, grain, etc. :—			
C. L. Keefe	$32 25		
F. M. Keefe	30 03		
		62 28	
Horseshoeing :—			
Thomas Evans	$49 55		
Helm & Nelson	8 15		
		57 70	
Lumber, The Buttrick Lumber Co.		10 73	
Painting, papering, etc. :—			
Thomas W. Scott		23 46	
Amounts carried forward		$2,040 99	$80,500 00

WATER WORKS, MAINTENANCE, GENERAL ACCOUNT — Concluded.

Amounts brought forward . . .		$2,040 99	$80,500 00
Printing :—			
Cambridge Chronicle Company .		6 25	
Professional services :—			
A. Greenwood, M. D. . . .		240 00	
Repairing leak in pipe lines :—			
Miller & Ellis		297 31	
Sign boards, Fred. E. Doty . .		8 25	
Sundries		19 30	
Telephone rent and tolls . . .		96 07	
Water rates, Waltham Water Works		14 00	
Total expenses, Stony Brook Reservoir		$2,722 17	
For Supply Account :—			
Labor, as per pay-rolls . . .		$1,411 59	
Expressage, Dodge Express Co. .		8 70	
Pipe and fittings :—			
Chapman Valve Manufacturing Co.	$1,205 32		
The Sumner & Goodwin Company .	12 50		
Walworth Manufacturing Company	997 32		
		2,215 14	
Total expenses, Supply Account . .		$3,635 43	

SUMMARY EXPENDED.

For General Account	$28,399 45	
Office expenses	6,481 87	
Pumping Station	15,071 54	
Fresh Pond Reservoir . . .	20,471 60	
Hobbs Brook Reservoir . . .	1,637 58	
Payson Park Reservoir . . .	819 54	
Stony Brook Reservoir . . .	2,722 17	
Supply Account	3,635 43	
Total		79,239 18
Balance unexpended . . .		$1,260 82

WATER WORKS.

MAINTENANCE, ABATEMENTS.

Appropriation	$5,200 00

EXPENDED.

For abatements allowed on water rates	3,793 75
Balance unexpended . . .	$1,406 25

WATER WORKS.

ICE FOR DRINKING FOUNTAINS.

Appropriation		$500 00
EXPENDED.		
For ice :—		
Boston Ice Company	$98 25	
Fresh Pond Ice Company	348 86	
Total		447 11
Balance unexpended		$52 89

WATER WORKS.

INTEREST ON WATER LOAN,

Appropriation		$130,049 00
EXPENDED.		
For interest on the water debt	$127,109 00	
Total		$127,109 00
Balance unexpended		$2,940 00

WATER WORKS.

MAINTENANCE, REFUNDS.

Appropriation		$3,000 00
EXPENDED.		
For refund on water rates		2,405 28
Balance unexpended		$594 72

WATER WORKS.

SINKING FUNDS.

Appropriation		$122,352 80
EXPENDED.		
Paid to Trustees of Sinking Fund of Water Works		122,352 80

CAMBRIDGE WATER WORKS.

In account with the City of Cambridge for the year ending November 30, 1901.

RECEIPTS AND EXPENDITURES.

Balance to the credit of Construction Account, November 30, 1900	$14,575 52	Expended for General Construction	$32,198 71
Received from sale of bonds	30,000 00	Balance carried forward to the credit of Construction Account, November 30, 1901	13,998 20
Premiums, accrued interest, etc	1,621 39		
	$46,196 91		$46,196 91
Maintenance revenue:—		Maintenance expenditures:—	
General	$2,426 90	Abatements	$3,793 75
Rates, fines, etc	327,722 48	General	79,239 18
Supplies	5,197 74	Ice for drinking fountains	447 11
		Interest	127,109 00
		Refunds	2,405 28
		Sinking Funds	122,352 80
	$335,347 12		$335,347 12

RECAPITULATION.

City Department Accounts.	Receipts.	Estimated Revenue.	Appropriations.	Expended.	Balances Unexpended.
Abatements			$30,000 00	$24,390 38	$5,609 62
Asesssors' Department			14,158 06	14,158 06	
Auditing Department			3,650 00	3,649 85	15
Board of Survey			500 00	269 26	230 74
Bridge Department	$390 00	$400 00	17,950 00	17,946 43	3 57
Cambridge Bridge			*297,180 02	188,986 03	108,193 99
Cemetery Department	17,466 39	17,500 00	18,150 12	18,150 12	
" " Filling Low Lands			*3,320 85	2,265 12	1,055 73
City Clerk Department	2,751 90	3,000 00	7,758 00	7 750 62	7 38
Classified Index			500 00	470 85	29 15
Printing Town Records			892 00	891 71	29
City Messenger Department			2,600 00	2,599 92	08
Civil Service Department			250 00	249 80	20
Clerk of Committees Department			4,000 00	3,990 23	9 77
Contingent Fund	623 37		16,983 61	16,940 96	42 65
Election Expenses:—					
City Clerk			5,700 00	5,699 31	69
Registrars of Voters			3,500 00	3,423 04	76 96
Supt. of Public Buildings			1,400 00	1,307 60	92 40
Electrical Department:—					
Lamps	67 00		72,800 00	72,775 75	24 25
Wires	166 42	100 00	10,500 00	10,499 95	05
Engineering Department	32 00		10,800 00	10,750 64	49 36
Assessors' Plans			300 00	300 00	
Executive Department			5,400 00	5,394 49	5 51
Fire Department	100 00	100 00	93,250 00	91,120 04	2,129 96
Health Department			18,500 00	18,499 95	05
Temporary Hospital	45 72		10,489 73	10,489 73	
Land for Temporary Hospital			10,000 00	10,000 00	
Inspection of Milk and Vinegar	200 50	150 00	1,700 00	1,670 25	29 75
Inspection of Provisions, etc			800 00	797 45	2 55
Interest	11,704 83	9,500 00	155,814 00	153,313 03	2,500 97
Land Damages			*44,732 91	14,494 90	30,238 01
Law Department	500 00	500 00	5,000 00	4,980 89	19 11
Overseers of the Poor Dept.:—					
City Home	876 92	600 00	22,450 00	22,434 44	15 56
Farm	5,173 83	6,000 00	5 000 00	4,992 91	7 09
House Offal	8,016 71	7,000 00	27,615 49	27,615 49	
Outside Aid	4,076 88	3,000 00	50,100 00	50,086 83	13 17
Salary of City Physician			1,500 00	1,500 00	
Park Department:—					
Construction and Lands	1,480 20	900 00	*142,593 18	136,270 29	6,322 89
Maintenance	1,777 61	1,500 00	23,827 61	23,745 44	82 17
Interest			46,040 00	44,880 00	1,160 00
Sinking Fund			21,208 33	21,208 33	
Plumbers' Examiners Dept.	49 50	35 00	150 00	115 00	35 00
Police Department	6,079 70	6,000 00	128,458 58	128,458 58	
Public Library:—					
Addition			*30,000 00	303 40	29,696 60
Current Expenses	5,226 53	5,380 00	19,000 00	18,998 75	1 25
East Cambridge Branch			1,320 00	1,319 85	15
Public Property:—					
Armory, Beech Street			2,300 00	2,280 00	20 00
City Buildings, Care and Repairs	5,614 77	4,600 00	19,950 98	19,950 98	
Incidentals			5,900 00	5,887 56	12 44
Land for School House, Ward 2			*9,500 00	9,500 00	
New School House, Ward 1			*79,984 53	59,003 64	20,980 89
" " " Ward 2			*80,000 00	76 20	79,923 80
Rifle Range			150 00	147 96	2 04
Sanitary Arrangements, School Houses			*30,000 00	23,591 53	6,408 47
School Houses, Care and Repairs	6,000 00	6,000 00	76,204 72	76,128 52	76 20
Wellington, Gore, and Felton Schools			*5,403 05	5,383 55	19 50
Amounts carried forward	$78,420 78	$72,265 00	$1,697,235 77	$1,402,105 61	$295,130 16

* Appropriation provided for by a Loan.

RECAPITULATION — *Concluded.*

City Department Accounts.	Receipts.	Estimated Revenue.	Appropriations.	Expended.	Balances Unexpended.
Amounts brought forward	$78,420 78	$72,265 00	$1,697,235 77	$1,402,105 61	$295,130 16
School Department: —					
Care of Truants	7 50		1,818 69	1,818 69	
Flags			200 00	123 00	77 00
Incidentals			1,935 70	1,935 70	
Salaries	7,203 11	5,700 00	341,700 00	341,684 05	15 95
Text-Books and Supplies	342 91	400 00	20,786 75	20,786 75	
Vacation Schools			1,900 00	1,885 48	14 52
Sealer of Weights and Measures	802 52	525 00	1,963 73	1,963 73	
Sewer Department: —					
Improved Sewerage			*125,391 65	76,546 14	48,845 51
Construction, General	7,377 34	8,000 00	*18,000 00	9,740 58	8,259 42
Maintenance	237 42	300 00	18,950 00	18,928 99	21 01
Sinking Funds: —					
Cambridge Bridge			2,000 00	2,000 00	
Clay Lands			5,335 00	5,335 00	
General			117,436 00	117,436 00	
Harvard Bridge			9,500 00	9,500 00	
Improved Sewerage			3,372 50	3,372 50	
State Aid	15,621 17	16,000 00	25,500 00	25,410 73	89 27
Stationery and Printing	1,134 35	1,000 00	3,200 00	3,199 56	44
Street Department: —					
Bridges			3,400 00	3,399 46	54
Cleaning Streets			30,000 00	29,999 64	36
Collection of Ashes			28,830 00	28,829 82	18
Construction, Belmont Street			*9,000 00	7,764 86	1,235 14
" Clark Street			*1,416 65	1,023 76	392 89
" Granite Street			*8,250 00	5,058 69	3,191 31
" Inman Court			*634 36	167 94	466 42
" Pleasant Street			*2,347 50		2,347 50
Maintenance	2,421 50	1,500 00	73,270 00	73,269 17	83
Paving (Edgestones and Sidewalks	14,165 74	15,000 00	25,000 00	24,999 90	10
Rebuilding Streets: Bridge St.			†20,040 86	17,996 54	2,044 32
Broadway			†9,981 08	9,981 08	
Brookline Street			†4,994 47	4,994 47	
Crossings, etc.			†9,999 48	9,999 48	
Harvard Square			†8,110 19	7,744 00	366 19
Mass. Avenue, R. R. Crossing to Harvard Bridge			†25,987 99	25,987 99	
Mt. Auburn Street			†9,996 12	9,996 12	
Watering Streets	17,425 63	17,000 00	26,683 84	26,683 84	
Treasury Department	2,661 74	2,500 00	15,600 00	15,596 05	3 95
	$147,821 71	$140,190 00	$2,709,768 33	$2,347,265 32	$362,503 01

* Appropriation provided for by a Loan. † Appropriation provided for by a Street Railway Tax.

Water Department Accounts.	Receipts.	Estimated Revenue.	Appropriations.	Expended.	Balances Unexpended.
Water Works Department: —					
Construction	$1,621 39		*$46,000 00	$32,198 71	$13,801 29
Maintenance	335,347 12	$339,000 00	80,500 00	79,239 18	1,260 82
Abatements			5,200 00	3,793 75	1,406 25
Ice for Drinking Fountains			500 00	447 11	52 89
Interest			130,049 00	127,109 00	2,940 00
Refunds			3,000 00	2,405 28	594 72
Sinking Funds			122,352 80	122,352 80	
	$336,968 51	$339,000 00	$387,601 80	$367,545 83	$20,055 97

* Appropriation provided for by a Loan.

CITY TREASURY.

DR.

To Cash in Treasury, December 1, 1900	$255,699 25	
Receipts as shown in the foregoing Statement (City Department Accounts)	147,821 71	
Receipts as shown in the foregoing Statement (Water Department Accounts)	336,968 51	
Amount received from Collector of Taxes for 1901	1,343,858 89	
Amount received from Collector of Taxes for other years	297,452 01	
Cemetery Fund	5,279 63	
Commissioners of Sinking Funds	175,000 00	
Loan, Cambridge Bridge	200,000 00	
Loan, City	36,000 00	
Loan, Parks	100,000 00	
Loan, Public Library	27,000 00	
Loan, School House	76,000 00	
Loan, Sewer	110,000 00	
Loan, Street	54,000 00	
Loan, Temporary	550,000 00	
Loan, Water	30,000 00	
Park Betterments	771 68	
Premium Account	31,431 00	
Tax, Corporation	82,813 60	
Tax, National Bank	16,541 23	
Tax, Street Railway	83,997 99	
		$3,960,635 50

CR.

By Amount expended as shown in the foregoing statement (City Department Accounts)	$2,347,265 32	
Amount expended as shown in the foregoing Statement (Water Department Accounts)	367,545 83	
Cemetery Fund	5,279 63	
Loan, Bridge	15,000 00	
Loan, High School	110,000 00	
Loan, School House	50,000 00	
Loan, Temporary	550,000 00	
Tax, County	100,429 89	
Tax, Lien Account	3,500 00	
Tax, Metropolitan Sewer	72,344 93	
Tax, National Bank	6,935 25	
Tax, State	55,790 00	
		3,684,090 85
Balance in Treasury		$276,544 65

SCHEDULE OF REAL ESTATE OWNED BY THE CITY OF CAMBRIDGE, AS SHOWN ON THE ASSESSORS' BOOKS, NOVEMBER 30, 1901.

Cambridge Cemetery :—			
60 1-100 acres of land		$60,000 00	
1 house		2,500 00	
			$62,500 00
Cambridge Public Library :—			
141,666 feet of land		85,000 00	
Library Building		115,000 00	
			200,000 00
Fire Department :—			
Hook and Ladder No. 2, Portland St.	$12,000 00		
11,931 feet of land	3,000 00		
		15,000 00	
Engine House No. 5, junction Cambridge and Hampshire Streets	10,000 00		
6,000 feet of land	5,000 00		
		15,000 00	
Engine House. south side Main, corner Deacon Street	12,000 00		
9,400 feet of land	7,300 00		
		19,300 00	
Engine House, Massachusetts Avenue	23,000 00		
9,532 feet of land	6,000 00		
		29,000 00	
Engine House No. 4, and stable, Massachusetts Avenue	5,300 00		
6,316 feet of land	3,700 00		
		9,000 00	
Engine House No. 6, River Street	12,000 00		
4,994 feet of land	2,500 00		
		14,500 00	
Engine House, east side Lexington Avenue	16,000 00		
15,262 feet of land	4,000 00		
		20,000 00	
Engine House, Massachusetts Avenue	26,000 00		
10,000 feet of land	8,000 00		
		34,000 00	
Engine House, Third Street	17,500 00		
10,100 feet of land	5,500 00		
		23,000 00	
			178,800 00
Overseers of the Poor Department :—			
14 242-1000 acres of land		21,000 00	
City Home buildings		25,000 00	
			46,000 00
Public buildings and lands :—			
City Hall, Massachusetts Avenue	200,000 00		
47.878 feet of land	72,000 00		
		272,000 00	
Ward One Building, Mt. Auburn St.	60,000 00		
16,153 feet of land	16,000 00		
		76,000 00	
Amounts carried forward		$348,000 00	$487,300 00

Amounts brought forward . . .		$348,000 00	$187,300 00
Public buildings and lands:—			
Ward Four Building, Green Street .	50,000 00		
13,028 feet of land	10,500 00		
		60,500 00	
Police Station, Fourth Street . .	20,000 00		
4,220 feet of land	2,100 00		
		22,100 00	430,600 00
Street Department:—			
Stables, sheds and scales, Hampshire Street	16,000 00		
72,661 feet of land	30,000 00		
		46,000 00	
City Stables, west side Raymond St. .	27,000 00		
272,670 feet of land	27,000 00		
		54,000 00	100,000 00
Park Department:—			
Park, Boylston, Mt. Auburn and Winthrop Streets, 11,565 feet of land .		17,000 00	
Park, south side Broadway, 107,181 feet of land		54,000 00	
Park, Hastings Square, 30,000 feet of land.		9,000 00	
Park, Dana Square, 33,531 feet of land		12,000 00	
Park, Pleasant Street, 1,372 feet of land		1,000 00	
Park, Pleasant and River Streets, 1,569 feet of land		1,200 00	
Fort Washington, east side Waverley Street, 42,123 feet of land . .		8,000 00	
Mill Pond Property, north side River Street, west side Blackstone Street, 72,700 feet		29,000 00	
Lot east side Portland Street, 18,011 ft.		5,500 00	
Lot, east side Norfolk Street, 39,600 ft.		12,000 00	
38 lots, Western Avenue, Putnam Avenue, Bancroft, Gilmore and Montague Streets, 119.085 feet .		27,000 00	
Lot, Second Street, 26,357 feet . .		5,200 00	
Lot west side Reed Street, 1,500 feet		100 00	
Lot, Walden Street, 16,365 feet . .		1,600 00	
Flats south side Main Street, 86,500 ft.		7,600 00	
Common, Garden St, Massachusetts Ave. and Waterhouse St., 370,785 ft.		370,000 00	
Park, Massachusetts Ave., Kirkland and Cambridge Sts., 33,357 feet .		66,000 00	
Park, Massachusetts Avenue and Harvard Square. 23,074 feet . . .		46,000 00	
Park, Massachusetts Ave. and Holmes Place, 20,956 feet		42,000 00	
Park, Rindge Avenue and Groveland Street, 501,729 feet . . .		10,000 00	
Mt. Auburn Street 60,508 feet . .		9,000 00	
Ward 3, Charles River Parkway 359,300 feet		70,000 00	
Ward 4, N. S. River, 20,100 ft. of land		3,000 00	
Building		3,000 00	
Amounts carried forward		$809,200 00	$1,017,900 00

Amounts brought forward . . .		$809,200 00	$1,017,900 00
Park Department:—			
Lot, south side Main, cor. Deacon, rear, 86,500 feet of land . . .		7,600 00	
Fresh Pond Lane and Huron Avenue, 46,479 feet		6,900 00	
South side Mt. Auburn Street, 60,508 feet		9,000 00	
Ward 2, Cambridge Field, Shelter House	28,000 00		
528,154 feet of land	22,000 00		
		50,000 00	
Building, north side Main and First Street	2,000 00		
5,605 feet of land	5,600 00		
		7,600 00	
Lot, south side Deacon Street, 12,210 ft.		1,000 00	
Triangular lot, Massachusetts Avenue and Arrow Street, 872 feet . .		1,300 00	
Burial ground, Massachusetts Avenue and Garden Street, 85,858 feet .			
Triangular lot, Chauncey and Garden Streets, 3,189 feet		2,000 00	
Buildings and lands, north side Bridge		1,000 00	
			895,600 00

SCHOOLHOUSES AND LANDS.

Ward One.

New Latin School	$225,000 00		
English High School, Broadway, .	220,000 00		
154,125 feet of land	84,700 00		
		$529,700 00	
Washington Grammar, Brattle Street	30,000 00		
14,951 feet of land	12,000 00		
		42,000 00	
Corlett Grammar, Holworthy Street	3,000 00		
10 000 feet of land	2,000 00		
		5,000 00	
Manual Training School, Broadway, Irving and Felton Streets:—			
Land, 81,128 feet	44,000 00		
Building and appliances . . .	56,000 00		
		100,000 00	
Agassiz Primary, Sacramento Street	18,000 00		
19,689 feet of land . . .	8,000 00		
		26,000 00	
Cushing Primary, Cushing Street .	3,000 00		
14,789 feet of land	1,500 00		
		4,500 00	
Dunster Primary, Concord Avenue .	4,000 00		
10,000 feet of land	3,000 00		
		7,000 00	
Holmes Primary, Hilliard Street .	6,000 00		
11,182 feet of land	5,600 00		
		11,600 00	
Lowell Primary, Lowell Street . .	7,000 00		
12,033 feet of land	3,600 00		
		10,600 00	
Amounts carried forward .		$736,400 00	$1,913,500 00

Amounts brought forward . . .		$736,400 00	$1,913,500 00
O'Reilly, Francis J., 59 Reservoir St.,			
1 house	3,600 00		
16,624 feet of land	3,300 00		
		6,900 00	
Riverside Primary, Putnam Avenue .	5,000 00		
11,199 feet of land	3,000 00		
		8,000 00	
Russell School, Larch Street . .	40,000 00		
33,073 feet of land	6,000 00		
		46,000 00	
S. S. Cambridge Street School House			
unfinished	7,400 00		
16,000 feet of land	9,600 00		
		17,000 00	
Ward Two.			
Merrill School, Fayette Street . .	45,000 00		
37,828 feet of land	19,000 00		
		64,000 00	
Wellington Training, Columbia Street	50,000 00		
18,870 feet of land	6,600 00		
		56,600 00	
Allston Grammar, Boardman Street .	30,000 00		
15,193 feet of land	4,600 00		
		34,600 00	
Harvard Grammar, Inman Street . .	65,000 00		
20,494 feet of land	12,000 00		
		77,000 00	
Bridge Primary, Pioneer Street . .	500 00		
4,646 feet of land	1,400 00		
		1,900 00	
Dana Primary, Centre Street . .	2,000 00		
14,317 feet of land	4,300 00		
		6,300 00	
Felton Primary, Amory Street . .	10,000 00		
15,090 feet of land	4,500 00		
		14,500 00	
Gannett (old) Primary, Columbia St. .	2,000 00		
8,803 feet of land	2,600 00		
		4,600 00	
Gannett (new) Primary, Jefferson St. .	12,000 00		
15,434 feet of land	3,000 00		
		15,000 00	
Sargent Primary, Broadway . .	3,000 00		
9,995 feet ofland	5,000 00		
		8,000 00	
Stearns Primary, Harvard Street . .	3,000 00		
10,050 feet of land	5,000 00		
		8,000 00	
Parker Primary, south side Broadway	15,000 00		
12,319 feet of land	7,000 00		
		22,000 00	
Roberts School, Harvard Street . .	48,000 00		
16,400 feet of land	7,200 00		
		55,200 00	
Amounts carried forward .		$1,182,000 00	$1,913,500 00

Amounts brought forward . . .		$1,182,000 00	$1,913,500 00
Ward Three.			
Putnam Grammar, Fourth and Otis Streets	65,000 00		
14,400 feet of land	9,800 00		
		74,800 00	
Thorndike Grammar, Thorndike Street	30,000 00		
10,027 feet of land	4,000 00		
		34,000 00	
Gore Primary, Gore Street . . .	36,000 00		
9,900 feet of land	4,000 00		
		40,000 00	
Lassell Primary, Charles Street . .	8,000 00		
10,000 feet of land	3,000 00		
		11,000 00	
Otis Primary, Otis Street . . .	20,000 00		
8,270 feet of land	4,000 00		
		24,000 00	
Taylor Schoolhouse	36,000 00		
23,592 feet of land	6,000 00		
		42,000 00	
Ward Four.			
Webster Grammar, Upton Street .	50,000 00		
25,839 feet of land	9,000 00		
		59,000 00	
Boardman Primary, Winsor Street .	13,500 00		
10,018 feet of land	4,000 00		
		17,500 00	
Tarbell Primary, Grigg Street . .	7,000 00		
19,500 feet of land	4,900 00		
		11,900 00	
Willard Primary, Lake Street . .	25,000 00		
20,079 feet of land	5,000 00		
		30,000 00	
Morse Schoolhouse, Allston and Brookline Streets	73,000 00		
25,650 feet of land	7,000 00		
		80,000 00	
Ward Five.			
Peabody Grammar, Linnæan Street .	68,000 00		
21,813 feet of land	9,800 00		
		77,800 00	
Shepard Grammar, Massachusetts Ave.	20,000 00		
14,755 feet of land	7,000 00		
		27,000 00	
Reed Primary, Reed Street . . .	4,000 00		
12,000 feet of land	1,200 00		
		5,200 00	
Wyman Primary, Rindge Avenue . .	6,000 00		
14,347 feet of land	4,000 00		
		10,000 00	
Sleeper School, Dudley Street . .	29,000 00		
21,284 feet of land	5,000 00		
		34,000 00	
Schoolhouse lot, Norris Street, 25,700 feet		5,000 00	
			1,765,200 00
Amount carried forward . . .			$3,678,700 00

Amount brought forward			$3,678,700 00
Sewer Department:—			
23,707 feet of land, Pilgrim Street	$5,900 00		
Stables, shed, house and building	4,100 00		
			10,000 00
Water Works:—			
House, shop and stables, south side Concord Avenue	4,000 00		
27 33-100 acres of land	16,700 00		
		20,700 00	
Land, south side Concord Avenue, 5-8 acre		300 00	
Land, east side Woodlawn Avenue, 15,735 feet		800 00	
Lot, rear of Grove Street, 272,800 feet		2,000 00	
Lot, south side Concord Avenue, 99,000 feet		1,000 00	
Land, south side Concord Avenue, 11,220 feet		100 00	
Two lots, south side Concord Avenue, 219,400 feet		2,200 00	
Gate-house lot, Concord Avenue, 43,560 feet		400 00	
Lot, south side Concord Avenue, 24,100 feet		300 00	
Fresh Pond Lane, 11 1-4 acres of land		11,000 00	
Kingsley Park, Fresh Pond Lane, 309,336 feet		8,000 00	
Lot, rear Fresh Pond Lane, 364,608 ft.		3,500 00	
Lot, Woodlawn Avenue, 107,616 feet		8,000 00	
Lot, Woodlawn Avenue, 26,989 feet		1,600 00	
Lot, rear Fresh Pond Lane, 239,541 ft.		5,000 00	
Lot, Woodlawn Avenue, 91,040 feet		2,000 00	
Lot, Holworthy Street, 18,480 feet			
Lot, south side Huron Avenue, 22,348 feet		700 00	
Lot, east side Cushing Street, 41,053 feet		800 00	
Lot, Cushing Street, corner Woodlawn Avenue, 95,482 feet		2,000 00	
Lot, Woodlawn Avenue, 24,096 feet		1,900 00	
Lot, east side Cushing Street, 639,550 feet		4,000 00	
Two lots, near Fresh Pond and Adams Place, 110,891 feet		1,000 00	
Land, Adams Place, 160,597 feet		1,400 00	
Lot, Woodlawn Avenue, 25,216 feet of land		1,200 00	
Land, Woodlawn Avenue, 133,336 feet		13,700 00	
Gravel pit, south side Concord Avenue, 397,417 feet		3,000 00	
190,500 feet of land, Huron Avenue		4,300 00	
Lot, south side Huron Avenue, 91,112 feet		500 00	
Near Concord Avenue, 4 1-2 acres		5,000 00	
Adams Place, 419,222 feet of land		10,000 00	
South side Concord Avenue, 10,805 feet of land		500 00	
South side Concord Avenue, 32,425 feet of land		700 00	
Amounts carried forward		$117,600 00	$3,688,700 00

Amounts brought forward . . .		$117,600 00	$3,688,700 00
Water Works:—			
South side Concord Avenue, 62,000 feet of land		1,200 00	
Lot, Huron Avenue, 1 3-4 acres .		1,000 00	
Concord Avenue, 294,000 feet of land		3,000 00	
Tudor Park, near Concord Avenue, 57,312 feet of land			
Pumping Station, Worthington Street	$50,000 00		
Dwelling house	2,000 00		
90,414 feet of land	18,000 00		
		70,000,00	
One house and stable, Lexington Avenue, Lake View Avenue and Vassal Lane	14,900 00		
88,077 feet of land	11,500 00		
		26,400 00	
Two houses, stable, sheds and building, south side Auburn Street .	5,700 00		
33,847 feet of land	6,600 00		
		12,300 00	
Lot, Grove Street, 150,000 feet . .		1,500 00	
Buildings, Grove Street . . .	5,000 00		
519,000 feet of land	6,000 00		
		11,000 00	
Lot, Fresh Pond Lane, corner Huron Avenue, 46,479 feet . . .		6,900 00	
Lot, Fresh Pond Lane, 211,835 feet .		20,000 00	
			270,900 00
Total			$3,959,600 00

EXEMPTED PROPERTY.

The following is a schedule of property used for religious, charitable and educational purposes, and exempt from taxation by law, not including that owned by the City of Cambridge, as shown on the Assessors' Books, November 30, 1901:—

Ward One.

Christ Church, Episcopal, Garden St.:—		
Church and Parish House . . .	$22,000 00	
22,701 feet of land	22,000 00	
		$44,000 00
First Parish, Church, Unitarian:—		
Church, Massachusetts Avenue .	17,000 00	
14,831 feet of land	43,000 00	
		60,000 00
Cambridge Social Union:—		
Personal property	1,500 00	
House, No. 42 Brattle Street . .	5,000 00	
13-22 of hall	8,500 00	
17,030 feet of land	9,100 00	
		24,100 00
Epworth Methodist Episcopal Church:—		
Church, Massachusetts Avenue .	80,000 00	
11,248 feet of land	10,000 00	
		90,000 00
Amount carried forward .		$218,100 00

Amount brought forward . . .		$218,100 00
Old Cambridge Baptist Society :—		
Church, Massachusetts Avenue and Harvard Street	$80,000 00	
34,573 feet of land	50,000 00	
		130,000 00
Shepard Congregational Society :—		
Church, Garden Street . . .	110,000 00	
34,353 feet of land	34,000 00	
		144,000 00
St. Peter's Roman Catholic Church :—		
Concord Avenue	45,000 00	
33,700 feet of land	11,000 00	
		56,000 00
St. Peter's Parish Hall Corporation :—		
Stores and hall, 70 Concord Avenue .	36,500 00	
11,850 feet	3,500 00	
		40,000 00
St. Paul's Roman Catholic Church :—		
Mount Auburn Street . . .	30,000 00	
11,216 feet of land	14,000 00	
		44,000 00
St. Paul's Catholic School Association :—		
Personal property	2,000 00	
School building	59,000 00	
House, Arrow and Mount Auburn Streets	8,000 00	
32,900 feet of land	33,000 00	
		102,000 00
Cambridge Hospital :—		
Personal property	26,252 51	
Buildings, Mount Auburn Street .	94,000 00	
411,452 feet of land	143,000 00	
		263,252 51
Cambridge Home for Aged People :—		
Personal property	77,635 01	
Building, Mount Auburn Street .	60,000 00	
42,975 feet of land	20,000 00	
		157,635 01
Longfellow Memorial Association :—		
Personal property	17,172 44	
Park, south side Brattle street, 93,618 feet	56,000 00	
		73,172 44
Episcopal Theological School, Trustees of :—		
Personal property	161,857 65	
Chapel, seminary and dormitories, Brattle and Mason Streets, and Hastings Avenue	320,200 00	
		482,057 65
Avon Home, Mount Auburn Street :—		
Building	22,000 00	
69,470 feet of land	28,000 00	
Personal property	81,761 97	
		131,761 97
Amount carried forward . .		$1,841,979 58

Amount brought forward . . .		$1,841,979 58	
Holy Ghost Hospital for Incurables :—			
Personal property	$5,230 00		
Building and house, Cambridge Street	56,000 00		
209,126 feet of land	62,000 00		
		123,230 00	
Radcliffe College :—			
Personal property	230,380 30		
Five houses, laboratory, schoolhouse and gymnasiums, Garden, Brattle, Mason and James Streets . .	135,700 00		
163,296 feet of land, including Ward Five property	140,700 00		
		506,780 30	
The Corporation of the New Church Theological School :—			
New chapel	15,000 00		
Personal property	92,997 00		
Two houses and stable, 42–48 Quincy Street	16,000 00		
81,450 feet of land	81,000 00		
		204,997 00	
President and fellows of Harvard College :—			
Personal property	10,447,845 27		
Dormitories, chapels, laboratories, museums, lecture rooms and houses, including Ward Five property	6,303,800 00		
		16,751,645 27	
Commonwealth of Massachusetts :—			
Metropolitan Park, 29 acres and 397,465 feet		130,500 00	
Jane Wilson (widow of disabled soldier), House, 9 Elmer Street . . .	900 00		
1,275 feet of land	300 00		
		1,200 00	
			$19,560,332 15
Ward Two.			
Baptist Church, Trustees of funds of :—			
Chapel, Hampshire Street . . .	$3,000 00		
2,500 feet of land	800 00		
		$3,800 00	
Broadway Baptist Church :—			
Church, west side Boardman Street .	30,000 00		
11,620 feet of land	8,000 00		
		38,000 00	
Cambridgeport Unitarian Society :—			
Church, north side Austin Street .	18,000 00		
13,116 feet of land	8,000 00		
		26,000 00	
Harvard Street Methodist Episcopal Society :—			
Church, north side Harvard Street .	22,000 00		
10,030 feet of land	8,000 00		
		30,000 00	
Amounts carried forward .		$97,800 00	$19,560,332 15

Amounts brought forward . . .		$97,800 00	$19,560,332 15
St. Paul's African M. E. Church :—			
Church, north side of Hastings Street	$7,500 00		
5,386 feet of land	2,000 00		
		9,500 00	
Hope Congregational Church :—			
Church, north side Harvard Street .	8,000 00		
6,000 feet of land	3,000 00		
		11,000 00	
Swedish Evangelical Missionary Church of Cambridge, 146 Hampshire Street, house and store	1,000 00		
3,879 feet of land	1,600 00		
		2,600 00	
St. Stephen's Baptist Church Buildings, 187-189 Broadway	500 00		
2,840 feet of land	1,100 00		
		1,600 00	
First Evangelical Congregational Society :—			
Church, west side Prospect Street .	40,000 00		
19,513 feet of land	12,000 00		
		52,000 00	
First Free Baptist Church: —			
Church, north side Harvard Street	9,000 00		
6,250 feet of land	4,700 00		
		13,700 00	
First Free Baptist Church :—			
Church, north side Hampshire Street	3,000 00		
3,851 feet of land	1,500 00		
		4,500 00	
First Universalist Society of Cambridge :—			
Church, east side Inman Street .	20,000 00		
15,312 feet of land	11,300 00		
		31,300 00	
St. Mary's Parochial School :—			
Church, west side Norfolk, corner Harvard Street	45,000 00		
Girls' School, south side Harvard Street	60,000 00		
Boys' School, east side Essex Street	18,000 00		
Sisters' Home, 50 and 52 Essex Street	7,000 00		
49,928 feet of land	20,000 00		
Theatre, east side Norfolk street .	15,000 00		
13,032 feet of land	6,500 00		
Gymnasium, east side Prospect Street	35,000 00		
11,370 feet of land	5,600 00		
House, 121 Norfolk Street . .	7,500 00		
7,500 feet of land	2,300 00		
		221,900 00	
First Reformed Presbyterian Church, west side Antrim Street . . .	7,500 00		
5,000 feet of land	2,000 00		
		9,500 00	
St. Bartholomew's Church, west side Columbia Street	6,000 00		
Building	500 00		
5,075 feet of land	1,500 00		
		8,000 00	
Amounts carried forward .		$463,400 00	$19,560,332 15

Amounts brought forward . . .		$463,400 00	$19,560,332 15
First United Presbyterian Church :—			
Church, south side Cambridge Street	$6,000 00		
9,173 feet of land	4,600 00		
		10,600 00	
Holy Ghost Hospital for Incurables, Cambridge Street:—			
72,310 feet of land		10,000 00	
			484,000 00

Ward Three.

Trinity Methodist Episcopal Church :—			
Church, Cambridge, corner Third Street	$25,000 00		
6,500 feet of land	16,300 00		
		$41,300 00	
Massachusetts Baptist Convention, Trustee :—			
Church. Cambridge and Fourth Streets	25,000 00		
6,000 feet of land	11,000 00		
		36,000 00	
Church of the Ascension :—			
Church, Third and Thorndike Streets	5,000 00		
4 800 feet of land	4,000 00		
		9,000 00	
Second Universalist Society :—			
Church, Otis Street	16,000 00		
5,950 feet of land	3,500 00		
		19,500 00	
Church of the Sacred Heart :—			
Church, Sixth, Otis and Seventh Streets	70,000 00		
15,400 feet of land	6,200 00		
		76,200 00	
Sacred Heart School Association :—			
St. John's Church, east side Fourth Street	5,000 00		
7,005 feet of land	4,200 00		
11,000 feet of land on Seventh Street	3,300 00		
		12.500 00	
County of Middlesex: —			
Court House, Third, Otis and Thorndike Streets	208,500 00		
Court House, Second, Otis and Thorndike Streets	180,000 00		
59,572 feet of land	60,000 00		
		448,500 00	
Registry of Deeds (new)— :			
Cambridge, Otis, Second and Third Streets	376,000 00		
59,380 feet of land	60,000 00		
Law Library	50,000 00		
		486,000 00	
Amounts carried forward . .		$1,129,000 00	$20,044,332 15

Amounts brought forward . . .		$1,129,000 00	$20,044,332 15
House of Correction, jail and shops, Thorndike, Third, Spring and Second Streets	$425,000 00		
59,880 feet of land	30,000 00		
		455,000 00	
St. John's Literary Institute :—			
Hall and stores, Cambridge Street, ⅔ value	20,000 00		
½ of 6,300 feet of land . . .	4,700 00		
Cash assets	5,383 53		
		30,083 53	
			1,614,083 53

Ward Four.

Cambridge Young Men's Christian Association :—			
Personal property	$15,322 99		
New building, Massachusetts Avenue	110,000 00		
24,145 feet of land	14,000 00		
		$139,322,99	
Immanuel Baptist Church :—			
Church, east side Magazine Street .	25,000 00		
11,250 feet of land	3,000 00		
		28,000 00	
First Baptist Society :—			
Church, Central Square . . .	80,000 00		
21,400 feet of land	20,000 00		
		100,000 00.	
First Church of the Evangelical Association of North America :—			
Church, 44 William Street . . .	5,000 00		
6,750 feet of land	2,700 00		
		7,700 00	
First Swedish Baptist Church of Cambridge :—			
One house, 77 Columbia Street . .	2,000 00		
2,765 feet of land	1,200 00		
		3,200 00	
Grace Methodist Episcopal Church :—			
Church, east side Magazine Street .	15,000 00		
7,750 feet of land	5,000 00		
		20,000 00	
Massachusetts Baptist Convention— Union Baptist Church :—			
Church, 874 Main Street . . .	10,000 00		
3,900 feet of land	3,900 00		
		13,900 00	
Amounts carried forward		$312,122 99	$21,658,415 68

Amounts brought forward . . .		$312,122 99	$21,658,415 68
Pilgrim Congregation Church :—			
Church, west side Magazine Street .	$30,000 00		
12,145 feet of land	9,300 00		
		39,300 00	
Baptist Home, 80 Chestnut Street, and 308 Brookline Street, one house and stable	11,500 00		
Personal property	4,241 44		
21,300 feet of land	10,000 00		
		25,741 44	
The Lamson Home, 322 Brookline Street, one house	5,000 00		
5,000 feet of land	2,000 00		
Personal property	8,622 92		
		15,622 92	
Mount Olive Baptist Church and Willard Welsh, for tax :—			
Building, State Street . . .	1,500 00		
5,000 feet of land	2,500 00		
		4,000 00	
Mount Olive Baptist Church, south side Front Street, Church unfinished .	5,000 00		
5,000 feet of land	2,500 00		
		7,500 00	
Protestant Episcopal Church, Trustees of Donations to :—			
Church, south side Massachusetts Avenue (St. Peter's) . . .	10,000 00		
9,229 feet of land	9,200 00		
		19,200 00	
East End Union Mission :—			
Church, west side Burleigh Street on Rogers' land		3,500 00	
Rush African M. E. Zion Church :—			
Church, south side School Street .	6,000 00		
2,760 feet of land	1,100 00		
		7,100 00	
St. Philip's Church, Episcopal :—			
Church north side Allston Street .	3,000 00		
4,646 feet of land	1,200 00		
		4,200 00	
Wood Memorial Church, Congregational :—			
Church, west side Columbia, corner Austin Street	30,000 00		
7,500 feet of land	4,000 00		
		34,000 00	
Prospect Union Association :—			
Personal property	13,015 23		
Building, 744 Massachusetts Avenue	4,700 00		
11,449 feet of land	9,200 00		
		26,915 23	
			499,202 58
Amount carried forward			$22,157,618 26

Amount brought forward . . .			$22,157,618 26
	Ward Five.		
Catholic Cemetery, Rindge Avenue, 304,014 feet of land		$30,000 00	
North Avenue Congregational Society :—			
Church, Massachusetts Avenue . .	$32,000 00		
13,430 feet of land	8,000 00		
		40,000 00	
Third Universalist Society :—			
Church, Massachusetts Avenue . .	30,000 00		
14,880 feet of land	10,000 00		
		40,000 00	
Trustees of Donations to the Protestant Episcopal Church :—			
Church and chapel, Massachusetts Avenue and Beech Street . .	75,000 00		
21,207 feet of land (cemetery lot included)	12,700 00		
		87,700 00	
Abbott, Edward, Trustee for, west side Beech Street :—			
Lot, 7,965 feet of land . . .		3,200 00	
North Avenue Baptist Society :—			
Church, Massachusetts Avenue . .	55,000 00		
38,525 feet of land	19,000 00		
		74,000 00	
Williams, John J., South side Rindge Avenue :—			
Schoolhouse	40,000 00		
20,220 feet of land	4,000 00		
		44,000 00	
Marist Fathers of Boston, French Roman Catholic Church :—			
Personal property	1,500 00		
Church, north side Harvey Street .	40,000 00		
14,645 feet of land	3,000 00		
		44,500 00	
Weymouth, Harrison G. O. (disabled soldier) :—			
Orchard Street, 4,800 feet of land		1,900 00	
			365,300 00
Total			$22,522,918 26

SCHEDULE OF CITY PROPERTY

AS FURNISHED BY

EXECUTIVE BOARDS AND HEADS OF DEPARTMENTS

IN

1900

BRIDGE DEPARTMENT.

Bridge.	Description of Buildings.	Value of Buildings.	Total.
Prison Point	House occupied by Drawtender	$1,200 00	
Craigie	House occupied by Drawtender	1,200 00	
"	Engine house and sheds	500 00	
"	Houses on pier, Cambridge end	800 00	
"	Boiler and engine for moving draw	200 00	
Harvard	House on pier and shed	800 00	
Brookline Street	Houses	600 00	
River Street	Two small houses	200 00	
Western Avenue	One small house	100 00	
North Harvard Street.	Two small houses	150 00	$5,750 00

CAMBRIDGE CEMETERY.

60 1-10 acres of land	$60,000 00	
1 house	2,500 00	
Personal property	2,000 00	
		$64,500 00

Purchased in 1853 and 1885.

ELECTRICAL DEPARTMENT.

LAMPS.

279 lamp posts in streets valued at $10.00 each	$2,790 00	
Office furniture	131 00	
Stock on hand in City Hall	190 00	
Stock on hand in Central Square building	285 00	
Horse and team	440 00	
		$3,836 00

WIRES.

Fire alarm apparatus and machinery	$13,220 00	
Fire alarm supply and reserve apparatus	915 00	
Fire alarm circuit wires and cross-arms (cost)	1,990 00	
95 fire alarm boxes	5,600 00	
Police signal apparatus and machinery	3,020 00	
Police signal supply and reserve apparatus	155 00	
Police signal circuit wires and cross-arms (cost)	2,320 00	
Police signal 1-10 mile cable	165 00	
80 police boxes	11,850 00	
Testing instruments	465 00	
Tools	550 00	
Furnishings	450 00	
Stock on hand	875 00	
Old and disused apparatus (depreciated value)	600 00	
Miscellaneous supplies	130 00	
Horses and teams	260 00	
Building in Belmont school-yard	400 00	
		$42,965 00

ENGINEERING DEPARTMENT.

PERSONAL PROPERTY.

4 transits	$400 00
2 levels	150 00
Miscellaneous small tools	100 00
Drawing instruments and stock	75 00
Furniture	200 00
Typewriting machine	75 00
Plans, 5750	25,000 00
Total	$26,000 00

FIRE DEPARTMENT.

REAL ESTATE.

Location.	Feet of Land.	Purchase of Land.	Erection of Building.	Value of Land.	Value of Building.
Engine House No. 2, } 384 Mass. Ave. }	.....	.....	.....	.....	.....
Ladder House No. 3, } 394 " " }	10,000	.....	1893	$8,000	$26,000
Engine House No. 3, 35 Third St.	10,100	1895	1895	5,500	17,500
Engine House No. 4, 2029 Mass. Ave....	9,532	1896	1896	6,000	23,000
Engine House No. 5, Inman Sq.....	6,000	1874	1874	5,000	10,000
Engine House No. 6, 176 River St.....	4,994	1890	1890	2,500	12,000
Engine House No. 7, 350 Main St.....	9,400	.....	1894-1895	7,300	12,000
Chemical Engine House No. 2, 167 Lexington Ave.....	15,262	1893	1893-1894	4,000	16,000
Ladder House No. 2, 276 Portland St....	11,931	.....	1887	3,000	12,000
				$41,300	$128,500

PERSONAL PROPERTY.

Apparatus	$59,800 25	
Bedding	1,534 25	
Furniture	3,596 90	
Horses and harnesses	11,201 00	
Tools	1,428 85	
Fire hats, badges, buttons, etc.	948 25	
		$78,509 50

BOARD OF HEALTH.

PERSONAL PROPERTY.

Temporary hospital furnishings	$900 00	
Laboratory furnishings	268 00	
Office furniture	150 00	
Typewriter	100 00	
1 horse	165 00	
1 ambulance	585 00	
1 Beverly wagon	175 00	
1 van	100 00	
2 sets harness	50 00	
Blankets and horse covers	20.00	
16 disinfecting lamps	100 00	
		$2,613 00

INSPECTION OF MILK AND VINEGAR DEPARTMENT.

PERSONAL PROPERTY.

12 platinum milk dishes	$175 00	
1 balance	15 00	
1 drying oven	6 00	
1 Babcock tester	3 00	
Chemicals, glassware and chemical apparatus	15 00	
		$214 00

CITY HOME ESTATE.

Thirty-two (32) acres land bought Aug 7, 1849.

Present City Home completed and placed under the care of the Overseers of the Poor, April 3, 1851.

Land cost	$12 000 00	
City Home cost	32 970 69	
Fences, furniture, etc., cost	3,000 00	
Total	$47,970 69	
Hospital cottage on City Home grounds built in 1886 at a cost of	$1,830 00	
Two-story brick building erected 1888 cost	5,600 00	
Land situated in Cambridge	14 242-1,000 acres	
" " " Somerville	7 954-1,000 "	
" " " Arlington	100-1,000 "	
Lands (saleable) on plan of April 10, 1884:— 30 lots of 5,000 feet each (in Somerville),	3 443-1,000 "	
Total acres of land	25 739-1,000 "	

About seven acres of City Home land lying south of Broadway in West Somerville has been sold for house lots. The remaining lots (30) contain 150,000 square feet, and have been held at a valuation of four cents per square foot, but are probably worth much more at the present time.

The valuation of the City Home real estate by the assessors is —

$25,000 00	for the buildings and
15,000 00	" " land
Total	$40,000 00

INVENTORY

of personal property at the City Home, Dec. 1, 1899:—

Book-keeping account books, stationery, etc.	$125 00	
Drugs, medicines and hospital supplies	325 00	
Dry goods, clothing, bedding, etc.	3,600 00	
Farm and stable: horses, cows, pigs, fowls, tools, wagons, fertilizers, produce, etc.	4,100 00	
Fuel	1,200 00	
House supplies, furniture, carpets, etc	3,000 00	
Ledge: steam boiler, steam drill and tools	1 000 00	
Offal Department: wagons, pungs, horses, harnesses, etc.	5,300 00	
Outside aid: delivery wagons, groceries etc.	400 00	
Provisions: groceries, spices, etc.	300 00	
Repairs: tools, lumber, lime, cement, hardware, etc.	400 00	
		$19,750 00

PARK DEPARTMENT.

REAL ESTATE.

	Feet of Land.	Rate per Foot.	Value.
River Parkway: —			
Section A	395,174	$1 00	$395,174 00
" B	859,000	2 00	1,718,000 00
" C	583,082	25 cts.	145,770 50
" D	1,668,709	cost	174,445 18
" F	605,084	cost	88,761 69
" G	699,948	60 cts.	419,968 80
" H	62,858	cost	11,426 49
Cambridge Field	528,154	cost	203,302 50
Rindge Field and Nursery	501,729	30 cts.	150,518 70
East Cambridge Embankment	363,825	cost	131,986 74
Commons and Squares: —			
Garden St., Massachusetts Ave. and Waterhouse St.	370,785		200,000 00
Massachusetts Ave., Kirkland and Cambridge Sts.	33,357		
Massachusetts Ave. and Peabody St.	23,674		
Massachusetts Ave. and Holmes Pl.	20,956		77,000 00
Massachusetts Ave. and Waterhouse St.	13,181		13,000 00
Washington Elm	886		550 00
Broadway Common	107,181		54,000 00
Fort Washington	42,123		8,000 00
Dana Sq.	33,531		12,000 00
Hastings Sq.	30,000		9,000 00
Winthrop Sq. (approx.)	11,611		11,000 00
Arsenal Sq.	3,189		2,000 00
Pleasant and River Sts.	1,569		1,200 00
Pleasant St. and Western Ave.	1,372		1,000 00
Massachusetts Ave. and Arrow St.	872		800 00
Total value of real estate			$3,828,904 60

PARK DEPARTMENT.

PERSONAL PROPERTY.

Stock at nursery	$1,500 00	
Office furniture	500 00	
Bathing suits and towels	500 00	
Horses (2) and harnesses	350 00	
Carriage and wagons	350 00	
Tools, etc.	300 00	
Total value of personal		$3 500 00
Value of real estate		$3,828.904 60
Value of personal		3,500 00
Total		$3,832,404 60

CITY PROPERTY IN USE BY POLICE DEPARMENT.

219	badges	$150 00	*Amount brought forward*		$2,366 50
87	belts	108 00	3	police signal systems	12,000 00
8	books	26 00	3	patrol wagons	1,000 00
4	bookcases	32 00	93	revolvers	450 00
8	bedsteads	40 00		Ropes and stakes	10 00
	Bedding and blankets	40 00	3	robes, carriage	20 00
1	buggy	200 00	1	rogues' gallery	150 00
8	clocks	25 00	3	saddles and bridles	12 00
2	bureaus	3 00	2	safes	200 00
80	chairs	100 00	95	short billies	42 00
1	carpet	10 00	8	spittoons	2 00
	Letter press and stand	10 00	1	sleigh	25 00
200	copies of police rules	40 00	1	stove	8 00
11	desks	125 00	2	straps and weights	1 00
1	easy chair, matron's	10 00	1	telephone line	300 00
5	horses	500 00	3	thermometers	1 50
6	harnesses	120 00	6	tables	24 00
5	horse blankets	15 00	40	tin dippers	9 00
4	halters	1 00	20	towels	4 00
1	hat rack	50	1	typewriter and desk	140 00
6	ink stands	3 00	2	umbrella stands	2 00
36	lanterns	27 00	1	wagon van, old	25 00
1	lounge	5 00	5	waste baskets	1 00
8	mirrors	14 00	4	water coolers	30 00
3	maps	15 00	1	wardrobe	10 00
10	rugs	20 00	4	water pails	1 00
9	pairs of handcuffs	27 00	2	wagon jacks	2 00
1	police van	300 00		Operating table and chair	37 50
1	ambulance	400 00	3	medicine cabinets	75 00
Amounts carried forward		$2,366 50	Total		$16,948 50

PUBLIC LIBRARY.

REAL AND PERSONAL ESTATE.

141,666 feet of land, as per assessor's books Nov. 30, 1899	$70,000 00	
Library building, as per assessor's books Nov. 30, 1899	116,000 00	
		$186,000 00
Estimated value of books in the library		57,000 00
Estimated value of interior furnishings		9,000 00
		$252,000 00

The lot occupied by the library building is bounded by Broadway, Irving, Cambridge and Trowbridge Streets. The land and buildings were presented to the City of Cambridge by Mr. Frederick H. Rindge in June, 1889, on the completion of the building, which was begun in the autumn of 1887. In 1894 a wing was added to the building at a cost to the city of $20,000.00.

The trustees of the library also hold the following funds, now invested in bonds of the City of Cambridge and deposited with the City Treasurer:—

Fay fund, schoolhouse loan bond, No. 254, due Aug. 1, 1918, 3½ per cent		$1,000 00	
Cummings fund, water loan bond, No. 38, due July 1, 1909, 4 per cent		2,000 00	
Citizens' subscription fund, invested as follows:—			
Sewer loan bond, No 7, due May 1, 1910, 4 per cent.	$5,000 00		
Sewer loan bond, No. 47, due Oct. 1, 1925, 4 per cent.	500 00		
		$5,500 00	
			$8,500 00

PUBLIC PROPERTY.

SCHOOLHOUSES.

	Feet of Land.	Purchase of Land.	Erection of Building.	Valuation of Land.	Valuation of Building.	Valuation of Furniture.
Agassiz	19,689	1874	1875	$8,000	$20,000	$1,215
Allston	15,193	1857	1857 1873 remodelled	4,600	30,000	1,795
Boardman	10,018	1866	1868	4,000	13,000	1,290
Bridge	4,646	1836	1836	1,400	500	.....
Corlett	10,000	1880	1880 purchased	1,200	3,000	195
Cushing	14,787	1880	1880 purchased	1,500	3,000	136
Dana	14,317	1847	1848	4,300	2,000	100
Dunster	10,000	1857	1871 remodelled	3,000	3,000	261
Ellis	25,700	1897	1898	6,000	48,000	2,993
Felton	15,090	1847	1848	4,500	6,000	200
Gannett	15,434	1876	1886	3,000	12,000	430
Gannett (old) / Wellington	27,673	1864 1875	1865 1884	2,600 5,700	2,000 50,000	395 2,240
Gore	9,900	1871	1871	4,000	50,000	825
Harvard	20,494	1870	1871 burned 1899 rebuilt	12,000	65,000	3,769
High	74,366	.....	1891	40,900	220,000	9,220
Holmes	11,182	1870	1870	5,000	5,500	275
Lassell	10,000	1880	1880	3,000	8,000	272
Latin	79,579	1894	1897	43,800	225,000	27,150
Lowell	12,033	1883	1883	3,600	5,500	402
Merrill	37,828	1861 1864	1864	19,000	45,000	1,425
Morse	25,650	1889	1890	7,000	73,000	2,040
Otis	8,270	1842 1857 1858	1859 1870 remodelled	4,000	20,000	930
Parker	12,319	.....	1893	7,000	15,000	710
Peabody	21,813	1887	18-8 1898 enlarged	9,800	68,000	3,340
Putnam	14,400	1825 1847 1896	1825 removed 1847 torn down 1889 rebuilt	9,800	64,500	2,550
Reed	12,000	1868	1868	1,200	4,000	310
Rindge, M. T.	81,128	.....	1887	44,000	56,000	8,000
Riverside	11,198	1868	1868	3,000	5,000	330
Roberts	16,400	1898	1898	12,000	48,000	3,003
Russell	33,073	1895	1896	6,000	40,000	2,440
Sargent	9,995	1838	1838	5,000	3 000	255
Shepard	14.755	1855	1856 1873 enlarged	11,000	26,000	1,047
Sleeper	21,284	1894	1894	5,000	24,000	1,190
S earns	10,050	1812	1841 burned 1843 rebuilt	5,000	3,000	322
Tarbell	19,500	1878	1882	4,900	7,000	355
Taylor	23,592	1894	1895	6,000	36,000	1,720
Thorndike	10,027	1860	1860 1875 remodelled	4,000	30,000	1,676
Washington	14,951	1851	1851 1871 remodelled 1878 altered	10,000	25,000	1,830
Webster	25,839	1852 1866 1889	1852 1873 remodelled 1885 enlarged	9,000	50,000	3,550
Willard	20,079	1869	1870	7,000	25,000	1,350
Wyman	14,347	1871	1871 1886 addition	4,500	5,000	555
				$356,300	$1,444,000	$92,091

PUBLIC PROPERTY.

CITY BUILDINGS.

	Feet of Land.	Purchase of Land.	Erection of Building.	Valuation of Land.	Valuation of Building	Valuation of Furniture.
City Hall.....	47,878	1888	1888	$72,000	$200,000	$29,800
Brattle Sq Bldg	16,153	1873	1874	16,000	60,000	2,500
Central Sq. Bldg.	13,028	1872	1873	10,500	50,000	2,436
Station 3	4,220	1862	1870	2,100	20,000	800
Ward 5 Bldg....	6,316	1872	1873	3,700	5,300	300
				$104,300	$335,300	$35,836

SCHOOL DEPARTMENT.

PERSONAL PROPERTY.

Text books	$16,177 23	
Desk, reference and library books	1,200 00	
Apparatus in R. M. T. S.	18,803 54	
Apparatus in other schools	4,987 84	
Stock on hand (books, apparatus and supplies)	5,305 70	
		$46,474 31

SEALER OF WEIGHTS AND MEASURES.

PERSONAL PROPERTY.

1 bay horse	$100 00		
1 express wagon	100 00		
1 light wagon	50 00		
1 heavy harness, 1 light harness	25 00		
1 plush robe	1 00		
		$276 00	
standard balance		150 00	
1 oak cabinet for same		50 00	
2 prescription scales, in cases		50 00	
2 roll top desks		30 00	
1 black walnut table		1 00	
5 office chairs		3 00	
1 platform scale with brass weights.		50 00	
1 metric bar, in case		10 00	
1 Sealer's trip scale		5 00	
1 set standard weights, avoirdupois, iron, 1-50 lb., 1-25 lb., 1-20 lb., 1-10 lb., 1-5 lb.		25 00	
2 sets standard weights, brass, 1-8 oz. to 4 lbs.		15 00	
2 sets standard dry measures		50 00	
2 sets standard wine measures		40 00	
Amounts carried forward			$755 00

Amount brought forward	$755 00	
1 set standard wine measures (incomplete)	3 00	
1 upright drill	5 00	
1 hand drill	2 00	
1 brass yard measure	2 00	
1 set Troy weights	3 00	
1 set metric weights, 1 gram to 1 kilo .	3 00	
1 extra kilo	1 50	
1 box grain weights, 1-10 grain to 500 grains	10 00	
40-50 lb. weights, for testing hay and coal scales	100 00	
Lot of tools, hammer, wrench, etc., etc.	2 00	
		$886 50

SEWER DEPARTMENT.

REAL ESTATE.

Location.	Buildings.	Erection of Buildings.	Purchase of Land.	Feet of Land.	Estimated Value of Land.	Estimated Value of Buildings.	Total.
Pilgrim Street...	Stable	1887					
" "	Sheds	1881 1884					
" "	House	1892 1890	1868	23,707	$5,900 00	$4,100 00	$10,000 00

SEWERS.

108,327 miles of sewers, which have cost to date $1,349,277 66

PERSONAL PROPERTY.

4 horses	$600 00	
1 buggy	150 00	
1 Concord wagon	150 00	
2 dump carts	200 00	
1 hose wagon	100 00	
1 express wagon	75 00	
6 sets of harness	180 00	
1 hoisting engine	400 00	
1 pile driver and hammer	100 00	
1 horse roller	75 00	
4 hand pumps	100 00	
Miscellaneous small tools	800 00	
Total		$2,930 00

Real estate	$10,000 00
Sewers	1,349,277 66
Personal property	2,930 00
Total	$1,362,207 66

STREET DEPARTMENT.

REAL ESTATE.

Location.	Buildings.	Erection of Buildings	Purchase of Land.	Feet or Acres of Land.	Valuation of Land.	Valuation of Buildings.
Raymond St.....	City Yard and Stable, stable, sheds, scales, etc	1897	1896	7 A.	$11,000	$33,000
Hampshire St...	City Stable, sheds and scales, including old police station.....	1885	....	72,661	30,000	17,000
E. S. Norfolk St.	Yard and pound	....	....	39,600	12.000	.....
River St.....	Yard and wharf.....	....	....	92,800	32,000	.....
Acton, Mass.....	Land, gravel bank	....	1896	32 A.	7,000	.....
					$92,000	$50,000
	Total valuation of Real Estate.....					$142,000

STREET DEPARTMENT.

PERSONAL PROPERTY.

70 horses	$7,000 00	
48 watering carts	12,000 00	
48 carts (30 single, 18 double)	4,800 00	
65 sets of harness	1,625 00	
23 sleds, 2 snow plows, 1 sleigh	1,350 00	
2 snow levellers, 16 gutter plows	340 00	
1 buggy, 4 foremen's wagons	400 00	
3 tool wagons, 1 bicycle	175 00	
2 hay racks, 1 caravan, 2 pungs	275 00	
3 steam road rollers	4,500 00	
1-2 horse section roller	150 00	
4 road machines	800 00	
2 road scrapers	400 00	
5 street sweepers	150 00	
Stone crushing plant, Raymond Street Yard	5,500 00	
Stone crushing plant, Hampshire Street Yard	6,000 00	
Tools and stable furniture	4,000 00	
Lumber, iron, paints, oils, etc.	1,800 00	
212 feet of straight edgestone	60 48	
248 feet of circle edgestone	148 80	
92 linear feet granite flagging	48 93	
37,000 paving blocks	740 00	
30,000 sidewalk bricks	390 00	
35,000 vitrified bricks	980 00	
1,500 tons cracked stone	1,950 00	
Total		$55,583 21
Real estate	$142,000 00	
Personal property	55,583 21	
Total		$197,583 21

WATER WORKS.

Street.	Buildings.	Date of Purchase.	Feet or Acres of Land.	Valuation of Land.	Valuation of Buildings.	Valuation of personal.
Adams Place		1890	160.597	$1,400		
"		1890	419,222	10,000		
S. S. Auburn	1 house & sheds.				$4,000	
" "	Stable (brick)				7,000	
" "	Shop (brick)	1868	(Lot 12) 33,847	6,600	5,500	$24,200
" Concord Ave	1 house (brick)					
" "	Shop and stable.		27 33-100 a.	16,700	4,000	325
" "		1890	$\frac{5}{8}$ a. (gravel pit)	300		
" "		1856	397,417	3,000		
" "		1886	99,000	1,000		
" " nr. Adams Street		1891	10,805	500		
S. S. Concord Ave		1886	11,220	100		
" " cor. Huron Ave.		1892	32,425	700		
S. S. Concord Ave		1890	219,400	2,200		
" "		1890	62,000 (G. H. lot)	1,200		
Concord Avenue		1890	43,560	400		
Near Concord Avenue and Railroad		1892	$4\frac{1}{2}$ a.	5,000		
S. S. Concord Ave		1890	24,100	300		
" "		1889	294,000	3,000		
" " between Fresh Pond and Watertown Branch of F. R. R.		1886	(Tudor Park) 57,312	1,500		
E. S. Cushing		1886	41,053	800		
" " , cor. Woodlawn Avenue, north end		1888	95,482	2,000		
Cushing, corner Woodlawn Ave		1888	639,550	4,000		
E. S. Cushing, cor. Woodlawn Avenue, south end		1888	(Tri'ngular lot on St.)	No value		
Fresh Pond Lane			211,835	20,000		
" "		1890	$11\frac{1}{4}$ a.	11,000		
R. Fresh Pond Lane		1886	364,608	3,500		
" " "		1886	239,541	5,000		
Near Fresh Pond Lane and Adams Place		1886	110,891	1,000		
Fresh Pond Lane, cor. Huron Ave.		1894	46,479	6,900		
Rear of Grove		1886	272,800	2,000		
" " "		1888	150,000	1,500		
" " "		1890	519,000	6,000		
Holworthy		1886	for ext'n St 18,480	No value		
S. S Huron Avenue (part lot)		1886	22,348	700		(in G. H.) 15
S. S. Huron Avenue (part lot)		1888	91,112	500		
Huron Avenue		1890	190,500	4,300		
" "		1890	$1\frac{3}{4}$ a.	1,000		
Kingsley Park		1867 1886	309,336	8,000		
Lake View Ave., cor. Vassal Lane			(Lot 34) 15,371	2,000		
E. S. Lake View Avenue			(Lot 32) 12,000	1,200		
E. S Lake View Avenue	House		(Lot 32) 9,000	1,000	7,000	
W. S. Lake View Avenue			(Lot 37) 9,180	1,000		
Amts carried for'd				$137,300	$27,500	$24,540

WATER WORKS — Continued.

Street.	Buildings.	Date of Purchase.	Feet or Acres of Land.	Valuation of Land.	Valuation of Buildings.	Valuation of Personal
Amts. brought for'd.				$137,300	$27,500	$24,540
E. S. Lake View Avenue			(Lot 31) 12,000	1,200		
E. S. Lexington Ave., cor. Worthington	House and stable		(Lot 63) 14,437	2,900	7,300	
Massachusetts Ave.	In City Hall					offi'e furn $1,000
Reservoir		1865	Reservoir 91,003	27,000		
Vassal Lane			(Lot 33) 10,795	1,000		
E.S. Woodlawn Ave.		1886	91,040	2,000		
Woodlawn Avenue		1886	24,096	1,900		
E.S. Woodlawn Ave.		1886	107,616	8,000		
N.S. Woodlawn Ave.		1887	25,216	1,200		
E.S Woodlawn Ave.		1886	15,735	800		
Woodlawn Avenue		1886	26,989	1,600		
E.S. Woodlawn Ave.						
	Woodlawn Ave. 9,910 29,471 22,100 4,000 7,000 7,333 14,328 12,280 — 106,422 Cushing 15,611 11,303 — 26,914		133,336	13,700		
Worthington	Pumping Station and machin'ry.	1856			50,000	pumping pl't, tools
	Dwelling house.	1873	90,414	18,000	2,000	$200,000
E. S. Worthington, cor. Lake View Avenue		1856 1883	(Lot 36) 5,294	800		
Nursery stock at Fresh Pond						5,000
Total				$217,400	$86,800	$230,540

REAL ESTATE AT HOBBS BROOK.

Value of land	$226,298 30	
Gate houses	6,710 40	
Keeper's house and stable	5,000 00	
Dams	132,297 73	
Personal property	120 00	
		$370,426 43

REAL ESTATE AT PAYSON PARK.

Value of land	$43,650 17	
Tool house	300 00	
Reservoir	287,000 00	
Personal property	30 00	
		$330,980 17

REAL ESTATE AT STONY BROOK.

Value of land	$138,080 73	
Keeper's house and stable	3,000 00	
Dam	289,000 00	
Personal property	50 00	
		$430,130 73

Valuation of :—

Main pipe	$624,830 00	
Supplies	210,735 00	
Boxes	12,500 00	
Fountains	5,600 00	
Gates	37,500 00	
Hydrants	42,525 00	
Ice water fountains	1,900 00	
Meters	9,285 00	
Standpipes	1,475 00	
Payson Park Line	198,000 00	
Stony Brook Line	237,600 00	
		$1,381,950 00

REPORT OF THE COMMITTEE ON ACCOUNTS

CAMBRIDGE, December, 1901.

To the Honorable City Council of the City of Cambridge: —

In conformity with the provisions of the City Ordinances, the Committee on Accounts for the year 1901, presents its annual report for the year ending November 30.

The Committee has met as often as once in each month during the year, and made the prescribed examination of the books and accounts of the Auditing Department, and has been highly gratified in finding them kept with the utmost care and accuracy.

FRED C. BEUNKE,
ALBERT H. HALL,
WILLIAM H. COLMAN,
JOSEPH E. SHARKEY,
} *Committee on Accounts.*

REPORT OF THE COMMITTEE ON FINANCE, 1901

This Committee would herewith submit the usual annual report of its estimates at the beginning of the financial year, and the condition of the City Treasury at its close on November 30, 1901.

The following is a condensed statement of the annual estimates as made at the beginning of the year: —

APPROPRIATIONS AND ESTIMATED REVENUE, 1901

City Department accounts	$140,190 00	
Water Department accounts	339,000 00	
Other revenue	376,000 00	
Cash in Treasury, December 1, 1900	255,699 25	
Grand total		$1,110,889 25

AGGREGATE AMOUNT OF APPROPRIATIONS RECOMMENDED.

	Revenue.	Expenses.
City Department accounts	$140,190 00	$2,541,990 72
Water Department accounts	339,000 00	384,952 75
	$479,190 00	$2,926,943 47

GENERAL RECAPITULATION.

Total estimated expenses as before recited	$2,926,943 47	
Allowance for City Treasurer's estimate of uncollected taxes for the year 1901, as of Nov. 30, 1901	250,000 00	
Total appropriations and liabilities		$3,176,943 47

LESS.

Estimated revenue of all kinds and cash in Treasury	$1,110,889 25
Leaving an amount to be provided for	$2,066,054 22

The Committee recommended that this amount be provided for by issue of funded loans as follows: —

Cambridge Bridge loan	$250,000 00	
Cambridge Park loan	100,000 00	
School House loan	80,000 00	
Sewer loan	110,000 00	
Street loan	56,500 00	
Water loan	31,500 00	
		$628,000 00
By assessment upon the polls and estates of the inhabitants of Cambridge, etc., for the current year, being the amount required for municipal expense for the year		1,438 054 52
		$2,066 054 22

In accordance with the foregoing estimates, the following orders were reported by the Committee, viz : —

CITY OF CAMBRIDGE
IN COMMON COUNCIL, March 5, 1901.

Ordered : That the sum of *one million, four hundred and thirty-eight thousand and fifty-four dollars and twenty-two cents* ($1,438,054 22) be raised by assessment upon the polls and estates of the inhabitants of the City of Cambridge, and the estates of non-resident proprietors, according to law, to defray the current expenses of the City for the financial year beginning December 1, 1900, and ending November 30, 1901.

CITY OF CAMBRIDGE
IN COMMON COUNCIL, March 5, 1901.

Ordered : That the sums following be and are hereby appropriated towards defraying the expenses of the City of Cambridge for the financial year beginning December 1, 1900, and ending November 30, 1901.

Following the latter order was a list of appropriations, in detail, copies of which were distributed to the members of the City Council, and published in the several newspapers of the City.

The final sheet of the City Auditor for the month of November shows that during the year the various appropriations were so changed that the aggregates were made as follows : —

City Departments	$2,709,768 33
Water Department	387,601 80
Total	$3,197,370 13

The usual sub-committee was appointed to examine the condition of the City Treasury at the close of business on Saturday, November 30, that being the last day of the financial year 1901. The Committee consisted of Alderman Carstein, President Merrill, of the Common Council, and Councilmen Clark and Rhoades.

This sub-committee attended to its duty and subsequently submitted the following report :—

CITY OF CAMBRIDGE, December 2, 1901.

To the Committee on Finance :—

GENTLEMEN : — The Sub-Committee appointed to count and examine the cash in the hands of the City Treasurer, at the close of business on November 30, 1901, would respectfully report :—

November 30, 1901. Actual cash and business checks in the City Treasurer's office amounted to		$15,778 99	
Also, a certificate from W. F. Earle, Cashier of the First National Bank of Cambridge, Mass., showing a balance (at close of business November 30, 1901), to the credit of the City Treasurer, of	$177,228 46		
From this balance should be deducted checks Nos. 14649, 14720 and 14721, not presented to bank for payment, amounting to	767 50		
Making a net balance in above bank, of		176,460 96	
Also, a certificate from Fred B. Wheeler, Cashier of the Lechmere National Bank, showing a balance (at close of business November 30, 1901), to the credit of the City Treasurer, of		16,154 39	
Also a certificate from Louis W. Cutting, Treasurer of the Cambridge Trust Company, of Cambridge, Mass., showing a balance (at close of business November 30, 1901), to the credit of the City Treasurer, of	$76,810 33		
From this balance should be deducted checks Nos. 220, 221, 222, 223, 224, 225 and 226, not presented for payment	7,225 60		
		69,584 73	
Making the total cash on hand			$277,979 07
December 13, 1901. After the above examination by your Committee, certain additional entries belonging to the financial year 1900 were made, the receipts and expenditures which these same represent being as follows:—			
RECEIPTS.			
Account of Overseers of the Poor Department:—			
Farm account, receipts for farm produce		$166 78	
House Offal Account, receipts from sales of offal		13 37	
From Commonwealth of Massachusetts:—			
Public Property—City Buildings, armory rents		1,000 00	
State Aid		14,942 61	
Corporation Tax		78,808 56	
National Bank Tax, being amount received for stocks of Massachusetts Banks outside of Cambridge, owned by Cambridge residents		16,210 67	
Street Railway Tax (Chapter 578, Acts of 1898)		83,997 99	
Overseers of Poor, Outside Aid		62 43	
Account of Taxes, 1900, additional to entry of November 30, 1901, but not previously reported		20 00	
Account of Taxes, 1901, additional to entry of November 30, 1901, but not previously reported		16,021 92	
Account of Street Watering Collections, taxes 1900 and 1901		119 88	
Account of Interest, Taxes 1900 and 1901		73 03	
Account of Treasury Department, costs on taxes 1900 and 1901		48 60	
A total of			211,485 84
Which amount, added to City Treasurer's cash balance of November 30, 1901, as above, makes a total of			$489,464 91

EXPENDITURES.

Authorized additional payments as of November 30, 1901, verified by your committee, are as follows :—		
Paid sundry persons :—		
Account of weekly pay-roll No 246	$11,376 11	
Paid Commissioners of Sinking Funds, for account of Water Loan Sinking Fund, being excess of receipts for water rates, over expenditures, for year ending November 30, 1901	2,649 05	
Paid Commonwealth of Massachusetts :—		
Account of Metropolitan Sewer Tax, being annual assessment of Interest, Maintenance and Sinking Fund charges, on account of Metropolitan Sewer	72,344 93	
Account of National Bank Tax, being refund of taxes on non-resident owners of stock in Cambridge Banks	6,935 25	
Account of State Tax, being assessment for the year 1901	55,790 00	
Account of Abatements. Taxes, Assessors' certificates, received and allowed on sundry taxes of 1901, as per additional entry of November 30, 1901	121 70	
A total of		$149,217 04
Which, deducted from the foregoing receipts, shows a balance of		$340,247 87
From this balance should be deducted the amount, held by City Treasurer on "Suspense Account," received from Cuban teachers, to be used as a prize for drawing in our public schools		100 00
Making net balance in City Treasurer's hands, as of November 30, 1901		$340,147 87
Your Committee would further state that we examined the total cash receipts and expenditures, as per City Treasurer's Ledger, and find the same to be as follows :—		
Total cash receipts from all sources for the year ending November 30, 1901	$3,704,936 25	
To this should be added cash balance of Nov. 30, 1900	310,175 64	
A total of		$4,015,111 89
Total cash expenditures for the year ending November 30, 1901—the same authorized by sundry drafts of the Mayor, which your Committee examined .		3,674,964 02
Which amount deducted from above total of receipts, shows a cash balance, as of November 30, 1901, verified by our above report, of		$340,147 87

The Sub-Committee were enabled to further verify the above statement of receipts and expenditures, by comparison with the City Auditor's statement for December, 1901.

Your Committee also examined the securities belonging to the several funds held in trust by the City Treasurer—namely, the Cemetery Fund; Sarah E. Russell Fund and Bridge Charitable Fund,—and find the same to be correct.

HANS L. CARSTEIN, *Chairman*,
JOHN D. MERRILL,
HERBERT A. RHOADES,
EDWARD E. CLARK.

To the foregoing there is little else to add. The Committee has had frequent meetings and important financial matters have been considered. The increasing demands upon the treasury, for expenditures of the public money, have been met it is believed with due consideration for the interest of the tax-payers.

GEORGE E. SAUNDERS,
HANS L. CARSTEIN,
ALBERT H. HALL,
JAMES F. AYLWARD,
HERBERT A. RHOADES,
EDWARD E. CLARK,
D. B. SHAUGHNESSY, JR.

Committee on Finance.

REPORT OF THE CITY TREASURER

City of Cambridge,

Office of City Treasurer, December 2, 1901.

To the Honorable, the City Council: —

In the following pages I submit a detailed report of the receipts and expenditures of the public funds by the Treasury Department, during the year ending November 30, 1901, including an account of all bonded and temporary loans negotiated in said year; also a detailed account of official fees received and reports on the Cemetery Fund and the Sarah E. Russell Fund.

Very respectfully,

WM. W. DALLINGER,
City Treasurer.

City of Cambridge in Account Current from December 1, 1900, to

Dr.

To authorized payments charged to City Accounts:—	
Abatements—Taxes	$24,390 38
Assessors' Department	14,119 21
Auditing Department	3,646 90
Bridge Department	17,493 58
Board of Survey	256 88
Cambridge Bridge	188,838 71
Cemetery Department	20,851 92
Cemetery Fund	5,279 63
City Clerk's Department	7,479 85
Classified Index	580 99
Printing Town Records	891 71
City Messenger's Department	2,614 56
Civil Service Department	232 80
Clerk of Committees Department	4,010 56
Contingent Fund	16,920 67
Election Expenses:—	
City Clerk	5,761 29
Registrars of Voters	3,503 61
Superintendent of Buildings	1,537 92
Electrical Department:—	
Lamps	72,593 39
Wires	10,355 02
Engineering Department	10,706 56
Assessors' Plans	300 00
Executive Department	5,349 60
Mayor's Contingent Fund	12 77
Fire Department	90,720 92
Health Department	39,289 61
Inspection of Milk and Vinegar Department	1,569 35
Inspection of Provisions Department	792 80
Interest	153,313 03
Land Damages	14,494 90
Law Department	4,979 78
Loan:—	
Temporary	55[illegible],000 00
High School	110,000 00
School House	50,000 00
Bridge	15,000 00
Overseers of the Poor Department:—	
City Home	21,894 76
Farm	5,084 85
House Offal	27,833 83
Outside Aid	53,121 27
Salary of City Physician	1,500 00
Park Department:—	
Construction and Lands	129,881 53
Interest on Park Loan	44,880 00
Maintenance	24,937 26
Sinking Fund	21,208 33
Plumbers' Examiners Department	100 00
Police Department	128,510 62
Public Library Department:—	
Addition to Building	303 40
Current Expenses	19,077 58
East Cambridge Branch	1,321 86
Public Property:—	
City Buildings—Care and Repairs	20,310 73
Incidentals	5,934 87
School Houses—Care and Repairs	76,424 48
Rifle Range	147 96
Armory Account	2,280 00
Amount carried forward	$2,032,642 23

Nov. 30, 1901 (inclusive,) with Wm. W. Dallinger, City Treasurer.

Cr.

By receipts as follows: —	
Bridge Department	$390 00
Cemetery Department	17,466 39
Cemetery Fund	5,279 63
City Clerk's Department	2,751 90
Commissioners of Sinking Funds	175,000 00
Contingent Fund	623 37
Electrical Department: —	
Lamps	67 00
Wires	166 42
Engineering Department	32 00
Fire Department	100 00
Health Department	45 72
Inspection of Milk and Vinegar Department	200 50
Interest	11,704 83
Law Department	500 00
Loan: —	
Temporary	550,000 00
Sewer	110,000 00
Park	100,000 00
Cambridge Bridge	200,000 00
City	36,000 00
Street	30,000 00
Water	30,000 00
Schoolhouse	76,000 00
Cambridge Street	24,000 00
Public Library	27,000 00
Overseers of the Poor Department: —	
City Home	876 92
Farm	5,173 83
House Offal	8,016 71
Outside Aid	4,076 88
Park Department: —	
Construction and Lands	1,480 20
Maintenance	1,777 61
Park Betterments	771 68
Plumbers' Examiners Department	49 50
Police Department	6,079 70
Premium Account	31,431 00
Public Library Department	5,226 53
Public Property: —	
City Buildings	5,614 77
Schoolhouses	6,000 00
School Department: —	
Care of Truants	7 50
Salaries	7,203 11
Text-Books and Supplies	342 91
Sealer of Weights and Measures Department	802 52
Sewer Department: —	
Construction—General	7,377 34
Maintenance	237 42
State Aid	15,621 17
Stationery and Printing	1,134 35
Street Department: —	
Cleaning Streets	10 00
Maintenance	2,411 50
Paving—Edgestones and Sidewalks	14,165 74
Watering	17,425 63
Tax: —	
Corporation	82,813 60
National Bank	16,541 23
Street Railway	83,997 99
Amount carried forward	$1,723,995 10

City of Cambridge in Account Current from December 1, 1900, to

Dr.

Amount brought forward	$2,032,642 23
New Schoolhouse—Ward 1	58,889 95
Furnishing New Latin Schoolhouse	275 08
Sanitary Arrangements—Schoolhouses	23,534 26
Wellington, Gore and Felton Schoolhouses	7,782 62
New Schoolhouse Lot—Ward 2	9,500 00
New Schoolhouse—Ward 2	76 20
School Department: —	
Care of Truants	1,775 25
Flags	132 25
Incidentals	1,549 15
Salaries	341,684 05
Text-Books and Supplies	19,982 24
Vacation Schools	1,835 66
Sealer of Weights and Measures	1,967 43
Sewer Department: —	
Construction—General	9,903 89
Improved Sewerage	78,893 77
Maintenance	19,049 07
Sinking Funds: —	
Cambridge Bridge	2,000 00
Clay Lands	5,335 00
General	117,436 00
Harvard Bridge	9,500 00
Improved Sewerage	3,372 50
State Aid	25,557 89
Stationery and Printing	3,202 10
Street Department: —	
Bridges	3,804 93
Cleaning Streets	31,489 77
Collection of Ashes	29,484 75
Construction—Clark Street	833 33
Construction—Inman Street	244 83
Construction—Granite Street	3,996 07
Construction—Belmont Street	7,051 22
Maintenance	72,858 08
Paving—Crossings, Repairs, etc	10,307 75
Paving—Edgestones and Sidewalks	24,710 59
Rebuilding Brookline Street	4,994 47
Rebuilding Bridge Street	8,623 38
Rebuilding Massachusetts Avenue	25,977 79
Rebuilding Cambridge Street	1,555 01
Rebuilding Pearl Street and Harvard Square	7,869 24
Rebuilding Broadway	9,981 08
Rebuilding Mt. Auburn Street	9,908 72
Watering	26,034 26
Tax: —	
County	100,429 89
Metropolitan Sewer	72,344 93
National Bank	6,935 25
State	55,790 00
Tax Lien Account	3,500 00
Treasury Department	15,311 44
Water Works Department: —	
Construction	32,198 49
Interest on Water Loan	127,109 00
Maintenance	77,191 33
Abatements	3,793 75
Refunds	2,405 28
Sinking Funds	122,352 80
Total Payments	$3,674,964 02
Cash Balance in Treasury, November 30, 1901	340,147 87
	$4,015,111 89

Nov. 30, 1901 (inclusive), with Wm. W. Dallinger, City Treasurer.

Cr.

Amount brought forward	$1,723,995 10
Taxes: —	
1896	210 76
1897	505 00
1898	2,446 88
1899	5,531 10
1900	288,758 27
1901	1,343,858 89
Treasury Department	2,661 74
Water Works Department: —	
Construction	1,621 39
Maintenance	335,347 12
Total Receipts	$3,704,936 25
Cash Balance in Treasury, November 30, 1900	310,175 64
	$4,015,111 89

FEES.

During the year the Treasurer has received official fees amounting to $2,661.74, itemized as follows: —

Summonses to delinquents	$1,334 83	
Preparing advertisements of sale	404 65	
Advertisements of sale	67 91	
Posting notices of sale	292 50	
Making tax deeds	350 00	
Making affidavits of tax sale	182 00	
Recording of deeds	18 10	
Recording of affidavit	30	
Court costs, from suit brought by City Treasurer	11 45	
		$2,661 74

These fees were all turned into the City Treasury as received.

CEMETERY FUND.

This fund comprises amounts paid into the City Treasury, by the owners of lots in our Cemetery, for the perpetual care of their lots therein. The fund is held in trust by the City Treasurer, and is invested as given below.

During the past year the City has accepted, in trust, the deed of one lot, (the same having previously been put in "perpetual care," by its owner,) and the additional amount of $102.00 paid the City thereon. The large amount of $5,279.63 was paid into the fund during the year. The amount of the fund November 30, 1901, was $54,543.18, invested as follows: —

City of Cambridge	4	per cent.	registered	bond,	due	November 1, 1903,	for	$10,000 00
"	"	3½	"	"	"	November 1, 1906,	"	7,000 00
"	"	4	"	"	"	November 1, 1907,	"	2,000 00
"	"	3½	"	"	"	August 1, 1908,	"	4,900 00
"	"	4	"	"	"	November 1, 1909,	"	2,000 00
"	"	4	"	"	"	May 1, 1910	"	5,000 00
"	"	4	"	"	"	October 1, 1916,	"	2,000 00
"	"	3½	"	"	"	August 1, 1918,	"	1,000 00
"	"	3½	"	"	"	November 1, 1919,	"	3,000 00
"	"	4	"	"	"	October 1, 1925,	"	7,500 00
Deposited in Cambridgeport Savings Bank								10,143 18
								$54,543 18

The interest received on this fund is annually credited to the account of "Cambridge Cemetery," to be expended by the Commissioners of Cambridge Cemetery, in the carrying out of the City's obligation.

SARAH E. RUSSELL FUND.

This is a fund, bequeathed by the late Sarah E. Russell, of Cambridge, in 1898, "the income therefrom to be annually expended in or towards providing a Christmas tree or Christmas gifts and entertainments for the inmates at the time of the Cambridge Almshouse." The amount of the bequest was $814.41, and was deposited in the Cambridgeport Savings Bank, where it now remains. The interest accumulations to November 30, 1901, will be handed to Capt. Eldridge, Warden of the City Home, to be used at the approaching Christmas, as stipulated in the will of Mrs. Russell.

Very respectfully,

WILLIAM W. DALLINGER,
City Treasurer.

TEMPORARY LOANS IN ANTICIPATION OF TAXES, NEGOTIATED IN THE YEAR ENDING NOVEMBER 30, 1901.

Date.	Maturity.	Amount.	
1901.	**1901.**		
January 28....	October 10....	$50,000	Discounted at 3 per cent. per annum.
February 5....	October 10....	50,000	" " 3 " "
April 4....	October 12....	20,000	" " 3.25 " "
April 5....	October 12....	50,000	" " 3.25 " "
April 6....	October 12....	30,000	" " 3.25 " "
May 8....	October 14....	50,000	" " 3.75 " "
June 20....	October 15....	50,000	" " 3.13 " "
July 15....	October 16....	25,000	" " 3.50 " "
July 15....	October 16....	75,000	" " 3.60 " "
August 9....	October 17....	50,000	" " 3.70 " "
September 5....	October 17....	12,000	" " 4.00 " "
September 5....	October 17....	38,000	" " 4.10 " "
September 18....	October 24....	50,000	" " 4.60 " "
		$550,000	Average rate 3.548 per cent.

These loans were all paid before the close of the financial year.

PARTICULARS CONCERNING THE BONDS NEGOTIATED DURING THE YEAR ENDING NOVEMBER 30, 1901.

Date of Bond.	Amount.	Loan.	Years to Run.	Rate of Interest.	Purchaser.	Price Paid.	Basis.
1901.							
Feb. 1...	$100,000	Cambridge Bridge	40	3	Adams & Co	Par	3.
July 1...	24,000	Cambridge Street	20	3½	Estabrook & Co	105.10	3.15
July 1...	30,000	Street	20	3½	Estabrook & Co	105.10	3.15
July 1...	30,000	Water	20	3½	Estabrook & Co	105.10	3.15
July 1...	76,000	School House	20	3½	Estabrook & Co	105.10	3.15
Aug. 1...	110,000	Sewer	30	3½	Adams & Co	106.25	3.175
Oct. 1...	100,000	Park	40	3½	N. W. Harris & Co	106.98	3.19
Nov. 1...	36,000	City	10	3½	Commissioners of Sinking Funds	103.00	3.125
Nov. 1...	100,000	Cambridge Bridge	40	3½	Estabrook & Co	108.381	3.125
Nov. 1...	27,000	Public Library	20	3½	Commissioners of Sinking Funds	105.50	3.125
	$633,000						

RECAPITULATION.

Cambridge Bridge Loan	$200,000	Schoolhouse Loan	$76,000
Cambridge Street Loan	24,000	Sewer Loan	110,000
City Loan	36,000	Street Loan	30,000
Public Library Loan	27,000	Water Loan	30,000
Park Loan	100,000	Total issue	$633,000

REPORT OF THE COMMISSIONERS OF THE SINKING FUNDS

To the Honorable, the City Council :—

The Commissioners of the Sinking Funds of the City herewith submit their annual report, covering the year ending November 30, 1901.

Under the operation of the amended Ordinance our report shows the condition of all the Sinking Funds of the City, both Municipal and Water.

The following is the condition of the strictly Municipal Loan Funds :—

DR.

The amount of the Funds, November 30, 1900, was	$1,021,466 00	
Received from the City of Cambridge, by its Treasurer, the annual requirements as appropriated by the City Council for the different loans	158,851 83	
Interest received on invested funds	39,536 15	
		$1,219,853 98

CR.

Paid the Treasurer of the City of Cambridge amount necessary to meet Schoolhouse Bonds maturing January 1, 1901	$100,000 00	
Paid the Treasurer of the City of Cambridge amount necessary to meet Bridge Bonds maturing July 1, 1901	15,000 00	
Paid the Treasurer of the City of Cambridge amount necessary to meet Schoolhouse Bonds maturing July 1, 1901	60,000 00	
Paid premium on investments purchased	2,759 70	
Paid accrued interest on investments purchased	241 92	
Leaving the amount of the Funds, November 30, 1901, all securities enumerated at par	1,041,852 36	
		$1,219,853 98

The following is the condition of the Water Loan Funds :—

DR.

The amount of the Fund, November 39, 1900, was	$604,326 58	
Received during the year as follows :—		
From sale of old reservoir site, Highland St.	13,278 67	
From the Treasurer of the City of Cambridge, the annual required appropriation from the water rates, viz.	122,352 80	
From interest on investments	23,807 90	
		$763,765 95

CR.

Amount paid for accrued interest on investments purchased	$868 42	
Amount paid for premiums on investments purchased	5,165 99	
Leaving the amount of the Fund, November 30, 1901	757,731 54	
		$763,765 95

Below we give a list of the investments of both Funds:—

The following are the investments belonging to the Municipal Funds:—

			Maturing			
Cambridge	City Bonds,	6s,	July	1, 1903	$1,000 00	
"	" "	6s,	July	1, 1904	94,000 00	
"	" "	6s,	July	1, 1905	63,000 00	
"	" "	3½s,	Nov.	1, 1909	32,000 00	
"	" "	3½s,	Nov.	1, 1911	36,000 00	
"	" "	3½s,	Nov.	1, 1919	18,000 00	
"	" "	3½s,	Nov.	1, 1921	27,000 00	
"	" "	3½s,	Nov.	1, 1929	42,000 00	
						$313,000 00
Gloucester	" "	4s,	May	1, 1902	4,000 00	
Quincy	" "	4s,	July	1, 1902	7,500 00	
Somerville	" "	4s,	July	1, 1902	14,000 00	
Cleveland, O.	" "	3 65-100s,	Sept.	1, 1902	1,000 00	
Brockton	" "	4s,	Dec.	1, 1902	4,000 00	
"	" "	4s,	June	1, 1903	4,000 00	
Quincy	" "	4s,	July	1, 1903	7,500 00	
Brockton	" "	4s,	Dec.	1, 1903	4,000 00	
"	" "	4s,	June	1, 1904	4,000 00	
Quincy	" "	4s,	July	1, 1904	7,500 00	
Lawrence	" "	4s,	July	1, 1904	12,000 00	
Pawtucket, R. I.	" "	4s,	July	1, 1904	15,000 00	
Hopkinton	Town "	4s,	Sept.	30, 1904	5,000 00	
Brockton	City "	4s,	Dec.	1, 1904	4,000 00	
Quincy	" "	4s,	July	1, 1905	7,000 00	
Haverhill	" "	4s,	Oct.	1, 1905	50,000 00	
Brockton	" "	4s,	Dec.	1, 1905	4,000 00	
Gloucester	" "	4s,	May	1, 1906	2,000 00	
Quincy	" "	4s,	July	1, 1906	1,000 00	
Fitchburg R. R. Co.		4s,	Apr.	1, 1907	50,000 00	
Watertown	Town "	3½s,	Jan. 1,	1908 to 1922	85,000 00	
Somerville	City "	4s,	July	1, 1908	8,000 00	
Belmont	Town "	4s,	Oct	1, 1908	15,000 00	
Medford	City "	4s,	Dec.	15, 1908	10,000 00	
New Bedford	" "	3½s,	Feb.	1, 1909	40,000 00	
Pawtucket, R. I.	" "	4s,	July	1, 1909	30,000 00	
Beverly	" "	4s,	July	1, 1911	9,000 00	
Medford	" "	4s,	July	1, 1911	26,000 00	
Boston & Lowell R. R. Co.		4s,	Feb.	1, 1913	1,000 00	
Medford	City Bonds,	4s,	July	1, 1915	23,000 00	
Melrose	" "	4s,	Feb.	24, 1916	10,000 00	
Brockton	" "	3½s,	July	1, 1916	5,000 00	
Boston & Lowell R. R. Co.		4s,	July	1, 1916	10,000 00	
Fitchburg R. R. Co.		4s,	July	1, 1916	10,000 00	
Marlborough	City Bonds,	4s,	July	1, 1918	10,000 00	
Medford	" "	4s,	Aug.	1, 1918	50,000 00	
Stoughton	Town "	4s,	June	1, 1920	2,000 00	
Reading	" "	4s,	June	1, 1922	5,000 00	
"	" "	4s,	June	1, 1923	5,000 00	
Medford	City "	4s,	July	1, 1923	2,000 00	
Old Colony R. R. Co.		4s,	Dec.	1, 1925	50,000 00	
Fitchburg R. R. Co.		4s,	Mar.	1, 1927	40,000 00	
						653,500 00
						$966,500 00
Cash in bank						75,352 36
						$1,041,852 36

The following are the investments belonging to the Water Loan Funds:—

Cambridge	City	bonds	4s,	Maturing	Feb.	1, 1913	$2,000 00	
"	"	"	4s,	"	Oct.	1, 1916	65,100 00	
"	"	"	3 1-2s,	"	Dec.	1, 1917	40,000 00	
"	"	"	3 1-2s,	"	Nov.	1, 1919	20,000 00	
"	"	"	4s,	"	Nov.	1, 1920	5,000 00	
								$132,100 00
Lynn	"	"	4s,	"	Jan.	1, 1905	19,000 00	
Wakefield	Town	"	4s,	"	Oct.	1, 1905	5,000 00	
Brookline	"	"	3 15-100	"	Apr.	1, 1906	20,000 00	
Providence, R. I.	City	"	5s,	"	July	1, 1906	50,000 00	
Hull	Town	"	3 1-2s,	"	Sept.	14, 1906	2,300 00	
Wakefield	"	"	4s,	"	Oct.	1, 1906	6,000 00	
Malden	City	"	4s,	"	Nov.	1, 1906	5,000 00	
Troy, N. Y.	"	"	3 1-2s,	"	Nov.	15, 1906	2,000 00	
Wakefield	Town	"	4s,	"	Oct.	1, 1907	6,000 00	
Malden	City	"	4s,	"	Nov.	1, 1907	5,000 00	
Troy, N. Y.	"	"	3 1-2s,	"	Nov.	15, 1907	2,000 00	
Hull	Town	"	4s,	"	May	1, 1908	5,000 00	
Methuen	"	"	4s,	"	Aug.	1, 1908	10,000 00	
Greenfield	"	"	3 1-2s,	"	Oct.	15, 1908	6,000 00	
Malden	City	"	4s,	"	Nov.	1, 1908	5,000 00	
Troy, N. Y.	"	"	3 1-2s,	"	Nov.	15, 1908	2,000 00	
West Springfield	Town	"	3 1-2s,	"	Dec.	1, 1908	12,000 00	
New Bedford	City	"	3 1-2s,	"	Feb.	1, 1909	16,000 00	
Methuen	Town	"	4s,	"	Aug.	1, 1909	15,000 00	
Greenfield	"	"	3 1-2s,	"	Oct.	15, 1909	6,000 00	
Malden	City	"	4s,	"	Nov.	1, 1909	5,000 00	
Troy, N. Y.	"	"	3 1-2s,	"	Nov.	15, 1909	2,000 00	
Taunton	"	"	3 1-2s,	"	June	1, 1910	21,000 00	
Somerville	"	"	4s,	"	July	1, 1910	8,000 00	
Greenfield	Town	"	3 1-2s,	"	Oct.	15, 1910	6,000 00	
Troy, N. Y.	City	"	3 1-2s,	"	Nov.	15, 1910	2,000 00	
Taunton	"	"	3 1-2s,	"	June	1, 1911	35,000 00	
Greenfield	Town	"	3 1-2s,	"	Oct.	15, 1911	12,000 00	
Troy, N. Y.	City	"	3 1-2s,	"	Nov.	15, 1911	2,000 00	
Pittsburg	"	"	3 1-4s,	"	Apr.	1, 1912	10,000 00	
Wakefield	Town	"	4s,	"	Oct.	1, 1912	1,000 00	
Troy, N. Y.	City	"	3 1-2s,	"	Nov.	15, 1912	2,000 00	
" "	"	"	3 1-2s,	"	Nov.	15, 1913	2,000 00	
" "	"	"	3 1-2s,	"	Nov.	15, 1914	2,000 00	
Lynn	"	"	4s,	"	Jan.	1, 1915	16,000 00	
Weymouth	Town	"	3 1-2s,	"	May	1, 1915	2,500 00	
Troy, N. Y.	City	"	3 1-2s,	"	Nov.	15, 1915	2,000 00	
Weymouth	Town	"	3 1-2s,	"	May	1, 1916	2,500 00	
Wellesley	"	"	4s,	"	Mar.	1, 1917	2,000 00	
Waltham	City	"	4s,	"	Apr.	1, 1917	24,000 00	
Weymouth	Town	"	3 1-2s,	"	May	1, 1917	2,500 00	
Hallowell, Me.	City	"	4s,	"	Jan.	1, 1918	15,000 00	
Wellesley	Town	"	4s,	"	Mar.	1, 1918	1,000 00	
Weymouth	"	"	3 1-2s,	"	May	1, 1918	2,500 00	
"	"	"	3 1-2s,	"	May	1, 1919	2,500 00	
Amounts carried forward							$381,800 00	$132,100 00

Amounts brought forward						$381,800 00	$132,100 00
Weymouth	Town bonds	3 1-2s,	Maturing	May	1, 1920	2,500 00	
Penobscot Shore Line R. R. Co.		4s,	"	Aug.	1, 1920	25,000 00	
Fitchburg R. R. Co.		3 1-2s,	"	Oct.	1, 1920	50,000 00	
Quincy	City bonds	4s,	"	May	1, 1923	2,000 00	
"	" "	4s,	"	May	1, 1924	1,000 00	
"	" "	4s,	"	May	1, 1925	2,000 00	
"	" "	4s,	"	May	1, 1926	3,000 00	
"	" "	4s,	"	May	1, 1927	3,000 00	
Attleborough	Town "	4s,	"	July	1, 1927	10,000 00	
Quincy	City "	4s,	"	May	1, 1928	3,000 00	
Winchester	Town "	4s,	"	June	1, 1928	6,000 00	
Quincy	City "	4s,	"	May	1, 1929	3,000 00	
Fall River	" "	3 1-2s,	"	Nov.	1, 1929	75,000 00	
Quincy	" "	4s,	"	May	1, 1930	3,000 00	
"	" "	4s,	"	May	1, 1931	3,000 00	
"	" "	4s,	"	May	1, 1932	1,000 00	
Newton	" "	4s,	"	Aug.	1, 1935	2,000 00	
"	" "	4s,	"	July	1, 1936	11,000 00	
Grafton	Town "	3 1-2s,	"	July	1, 1937	1,000 00	
Old Colony R. R. Co.		4s,	"	Jan.	1, 1938	25,000 00	
Grafton	Town bonds	3 1-2s,	"	July	1, 1938	2,000 00	
"	" "	3 1-2s,	"	July	1, 1939	2,000 00	
							$617,300 00
							749,400 00
Cash deposited in bank							8,331 54
							$757,731 54

To the Board of Commissioners of the Sinking Funds of the City of Cambridge :—

Your Committee appointed to examine the accounts of the Treasurer of the Funds reports that his books are carefully kept and his accounts are properly vouched. We have computed the cash and bond transactions for the year, independently of the Treasurer's books, and have figured the interest accrued, thus proving the absolute accuracy of his accounts.

The transactions of the Treasurer and the sub-committee on investment during the year, and the present condition of the Funds is shown by the following statement :—

CITY DEBT FUNDS.

BOND ACCOUNT.

Amount of bonds in the Funds, November 30, 1900 .	$940,000 00	
Amount of bonds purchased during the year . .	66,000 00	
	$1,006,000 00	
Amount of bonds matured during the year . . .	39,500 00	
Amount of bonds, at par value, November 30, 1901 .		$966,500 00
Amount carried forward		$996,500 00

Amount brought forward			$996,500 00

CASH ACCOUNT.

Cash on hand November 30, 1900 . .	$81,466 00		
Cash received from City Treasurer derived from taxation . . .	158.851 83		
Cash from interest on investments .	39,536 15		
Cash from matured bonds . . .	39,500 00		
		$319,353 98	
Cash paid for bonds purchased . .	$66,000 00		
Cash paid for premium on bonds purchased	2,759 70		
Cash paid for accrued interest on bonds purchased	241 92		
Amount paid to City Treasurer to redeem City Debt falling due this year .	175,000 00		
		244,001 62	
Cash on hand November 30, 1901 . .			75,352 36
Total amount of City Debt Funds, November 30, 1901			$1,041,852 36

WATER WORKS FUNDS.

BOND ACCOUNT.

Amount of bonds in the Funds November 30, 1900 .	$587,100 00	
Amount of bonds purchased during the year . .	162,300 00	
Amount of bonds at par value, November 30, 1901 .		$749,400 00

CASH ACCOUNT.

Cash on hand November 30, 1900 . .	$17,226 58		
Cash received from water rates, fines, etc.	122,352 80		
Cash received from interest on investments	23,807 90		
Cash received from sale of old reservoir	13,278 67		
		$176,665 95	
Cash paid for bonds purchased . .	$162,300 00		
Cash paid for premium on bonds purchased	5,165 99		
Cash paid for accrued interest on bonds purchased	868 42		
		168,334 41	
Balance cash on hand			8,331 54
Total amount of Water Works Sinking Fund, November 30, 1901 . .			$757,731 54

FRANK A. ALLEN,
JOHN C. BULLARD,
} *Committee on Accounts.*

City Bonds amounting to $603,000.00 have been issued during this year. Bonds to the amount of $175,000.00 matured this year and were paid from this Fund. The total amount of the City Debt proper now outstanding is $5,042,400.00. Deducting the present assets of this Fund, $1,041,852.36, leaves the net amount of the Bonded City Debt, exclusive of the Water Debt, November 30, 1901, $4,000,547.64, which shows a net increase of the City Debt this year of $407,613.64. The net valuation of the City for 1901, real and personal, as found by the Assessors, is $95,492,641.00, an increase of $2,161,876.00 above the net valuation of 1900. There will be due to this Fund from taxation in 1902 the sum of $158,841.83. There will mature next year City Bonds amounting to $145,000.00, which will be paid from this Fund.

SINKING FUNDS OF THE WATER WORKS.

Bonds on account of the Cambridge Water Works to the amount of $30,000.00 have been issued during the current year. The total amount of the Bonded Water Debt now outstanding is $3,332,100.00. Deducting from this sum the present assets of this Sinking Fund, $757,731.54, leaves the net amount of the Bonded Water Debt, November 30, 1901, $2,574,368.46, showing a decrease in the net amount of this Debt during this year, of $123,404.96. No Water Bonds matured this year and none will mature before 1906. There will be due this Fund from water rates in 1902 the sum of $120,828.75.

The gross Municipal Debt November 30, 1901		$5,042,400 00
Par value of Sinking Funds held for same		1,041,852 36
Leaving net Municipal Debt		$4,000,547 64
Gross Water Loan Debt	$3,332,100 00	
Par value of Sinking Funds held for this Loan	757,731 54	
		2,574,368 46
Net Municipal and Water Debt		$6,574,916 10

FRANK A. ALLEN,
DANA W. HYDE,
ANDREW J. LOVELL,
J. HENRY RUSSELL,
JOHN C. BULLARD,
GEORGE H. HOWARD,

Commissioners of the Sinking Funds of the City of Cambridge.

The Bonded City Debt matures as follows, viz : —

May 2, 1902, Street	4s	$55,000	00
May 2, 1902, Building	4s	20,000	00
Nov. 1, 1902, Paving	4s	50,000	00
Nov. 1, 1902, Schoolhouse	4s	20,000	00
July 1, 1903, Sewer	6s	136,000	00
July 1, 1903, Street widening	6s	10,000	00
Nov. 1, 1903, Building	4s	40,000	00
July 1, 1904, Sewer	6s	295,000	00
July 1, 1904, Street widening	6s	90,000	00
Aug. 1, 1904, City	4s	52,000	00
July 1, 1905, Sewer	6s	144,000	00
July 1, 1905, Street widening	6s	14,000	00
Aug. 1, 1905, Cemetery	4s	65,000	00
Nov. 1, 1907, Sewer	4s	30,000	00
Nov. 1, 1907, Paving	3½s	20,000	00
Nov. 1, 1907, Schoolhouse	3½s	9,500	00
Nov. 1, 1907, Street	3½s	11,000	00
Aug. 1, 1908, City	3½s	4,900	00
July 1, 1909, City	3½s	45,000	00
Nov. 1, 1909, Sewer	4s	22,000	00
Nov. 1, 1909, City	3½s	32,000	00
May 1, 1910, Sewer	4s	15,000	00
Nov. 1, 1910, Cemetery	3½s	7,000	00
Nov. 1, 1910, City	3½s	36,000	00
July 1, 1911, Sewer	4s	15,000	00
July 1, 1911, Clay Land	4s	50,000	00
Nov. 1, 1911, City	3½s	36,000	00
Nov. 1. 1912, Clay Land	3½s	20,000	00
Aug. 1, 1913, Clay Land	3½s	10,000	00
July 1, 1914, Clay Land	3½s	17,000	00
Aug. 1, 1914, Building	4s	118,000	00
Aug. 1, 1914, Street	4s	30,000	00
Oct. 1, 1915, Building	4s	60,000	00
Oct. 1, 1915, Street	4s	60,000	00
July 1, 1916, Building	4s	70,000	00
Oct. 1, 1916, Street	4s	137,000	00
Oct. 1, 1916, Building	4s	33,000	00
Oct. 1, 1916, Sewer	4s	75,000	00
Oct. 1, 1916, Schoolhouse	4s	6,000	00
July 1, 1917, Schoolhouse	3½s	100,000	00
Oct. 1, 1917, Harvard Bridge	4s	10,000	00
May 2, 1918, Schoolhouse	3½s	100,000	00
May 2, 1918, Street	3½s	15,000	00
June 1, 1918, Schoolhouse	3½s	50,000	00
July 1, 1918, Harvard Bridge	4s	100,000	00
Aug. 1, 1918, Schoolhouse	3½s	142,000	00
Sept. 1, 1918, Harvard Bridge	4s	100,000	00
Mar. 1, 1919, Harvard Bridge	4s	115 000	00
July 1, 1919, Schoolhouse	3½s	42,000	00
Nov. 1, 1919, Street	3½s	5,000	00
Nov. 1, 1919, Schoolhouse	3½s	13,000	00
Nov. 1, 1920, Harvard Bridge	4s	5,000	00
Nov. 1, 1920, Street	3½s	21,000	00
July 1, 1921, Harvard Bridge	4s	60,000	00
July 1, 1921, Street	3½s	30,000	00
July 1, 1921, Cambridge Street	3½s	24,000	00
July 1, 1921, Schoolhouse	3½s	76,000	00
Nov. 1, 1921, Public Library	3½s	27,000	00
Aug. 1, 1923, Harvard Bridge	4s	10,000	00
Amount carried forward		$3,005,400	00

Amount brought forward			$3,005,400 00
Feb. 1, 1924, Park	4s	360,000 00	
Aug. 1, 1924, Sewer	4s	75,000 00	
Oct. 1, 1925, Sewer	4s	60,000 00	
Aug. 1, 1926, Park	4s	100,000 00	
Oct. 1, 1926, Park	4s	40,000 00	
Nov. 1, 1929, Sewer	3½s	42,000 00	
July 1, 1930, Sewer	3½s	100,000 00	
Aug. 1, 1931, Sewer	3½s	110,000 00	
Aug. 1, 1935, Park	4s	100,000 00	
Feb. 1, 1936, Park	4s	100,000 00	
Sept. 1, 1937, Park	3½s	100,000 00	
Nov. 1, 1937, Charles River Improvement	3½s	50,000 00	
June 1, 1938, Park	3½s	50,000 00	
Aug. 1, 1938, Park	3½s	50,000 00	
Aug. 1, 1938, Charles River Improvement	3½s	50,000 00	
July 1, 1939, Cambridge Bridge	3½s	50,000 00	
Aug. 1, 1939, Park	3½s	100,000 00	
July 1, 1940, Cambridge Bridge	3½s	100,000 00	
July 1, 1940, Park	3½s	50,000 00	
Nov. 1, 1940, Park	3½s	50,000 00	
Feb. 1, 1941, Cambridge Bridge	3s	100,000 00	
Oct. 1, 1941, Park	3½s	100,000 00	
Nov. 1, 1941, Cambridge Bridge	3½s	100,000 00	
			$5,042,400 00

The Bonded Water Debt matures as follows :—

Nov. 1, 1906	3½s	$43,000 00
Oct. 1, 1907	4s	90,000 00
Nov. 1, 1907	4s	22,000 00
July 1, 1908	4s	46,000 00
Aug. 1, 1908	4s	25,000 00
July 1, 1909	4s	20,000 00
May 1, 1910	4s	288,000 00
July 1, 1910	4s	75,000 00
Sept. 1, 1910	4s	125,000 00
Jan. 1, 1911	4s	20,000 00
Oct. 1, 1911	4s	35,000 00
Jan. 1, 1912	4s	150,000 00
May 2, 1912	4s	75,000 00
Nov. 1, 1912	4s	45,000 00
Feb. 1, 1913	4s	100,000 00
Aug. 1, 1913	4s	50,000 00
Apr. 1, 1915	4s	200,000 00
Aug. 1, 1915	4s	200,000 00
Apr 1, 1916	4s	100,000 00
July 1, 1916	4s	200,000 00
Aug. 1, 1916	4s	100,000 00
Oct. 1, 1916	4s	265,100 00
Apr. 1, 1917	3½s	200,000 00
July 1, 1917	3½s	100,000 00
Nov. 1, 1917	3½s	75,000 00
Dec. 1, 1917	3½s	140,000 00
May 2, 1918	3½s	50,000 00
June 1, 1918	3½s	60,000 00
Nov. 1, 1918	3½s	50,000 00
Nov. 1, 1919	3½s	23,000 00
Nov. 1, 1920	3½s	30,000 00
July 1, 1921	3½s	30,000 00
Apr. 1, 1924	4s	300,000 00
		$3,332,100 00

REPORT OF THE CAMBRIDGE WATER BOARD

CAMBRIDGE, December 13, 1901.

To the Honorable, the City Council of the City of Cambridge:—

The thirty-seventh annual report of the Cambridge Water Board, for the year ending November 30, 1901, is herewith submitted for your consideration.

No material change has taken place during the year in the quality or quantity of the water supplied by the different reservoirs owned by the City. The previous high standard of quality has been fully maintained, and the quantity supplied to Fresh Pond, by the aquaduct from Stony Brook, has been adequate to the needs of our present population. It must not be forgotten, however, that during the past two years the annual rainfall has been considerably above the average of previous years.

Continued watchfulness and care are therefore required in order to prevent unnecessary waste, if we would avoid the large expenditure which would be involved in the laying of an additional pipe from Stony Brook.

All the reservoirs of the system, with their surroundings, are in good repair, and in excellent sanitary condition, and the buildings, pumping station and engines are in good order and repair, and fully up to the standard of previous years.

FINANCIAL STATEMENT IN BRIEF.

The total cost of the Water Works to November 30, 1901, was	$5,670,229 52
There was expended during the year on Construction account	32,198 71
So that the total cost to November 30, 1901, was	$5,702,428 23

WATER BOARD ACCOUNT.

The whole amount of bonds outstanding is	$3,332,100 00
Deducting from this sum the present value of the Water Debt Sinking Fund, exclusive of the note of the City for $200,000	757,731 54
Leaves as net Water Debt	$2,574,368 46
Further details of the financial condition of the department will be found in the statement of the Registrar annexed to this report. From that statement it will appear that the excess of receipts over expenditures during the past year is the sum of	$2,649 05

During the year the old reservoir, with the land appurtenant to the same, on Highland Street has been surrendered to the heirs of Charles C. Little, according to the condition of the original deed, which provided that

in case of disuse the same should revert to said heirs, and the small strips of land adjoining the same, which the City owned absolutely, have been sold to said heirs, and the proceeds of the surrender and sale, namely $13,278.67 paid into the Water Works Sinking Fund, all by vote of the City Council.

Previous to the surrender and sale, all the pipes and fittings were disconnected, and the ends of the pipes plugged, so that no connection with the old reservoir now exists.

FRESH POND.

In accordance with the recommendation of the Water Board, an appropriation was made by the City Council in March, last, of the sum of $12,000, out of the surplus receipts of the Water Works, for the purpose of completing a portion of the unfinished work around Fresh Pond. Eleven thousand five hundred dollars of this sum have been expended, under the direction of the Superintendent, in grading and resurfacing a large area of rough and uneven land, on the west side of the Pond adjoining Huron Avenue and near Concord Avenue.

This improvement is very marked, and has called forth many favorable comments from citizens who have had occasion to visit the locality; and, in the opinion of the Board, the money has been well invested. Other places around the Pond are still in need of improvement, and the Board earnestly recommends that the City Council make a further appropriation for the same purpose, for the coming municipal year.

Complaint has been made to the Board, that motor vehicles frequently resort to the driveway around the Pond, to the danger and discomfort of persons who ride and drive thereon, owing to their horses taking fright at the sight of such vehicles.

The Board suggest to the City Council, the passage of an ordinance prohibiting the use of the driveway by motor-vehicles.

On account of the sharp curves in the roadway, such vehicles are much more dangerous there than in any other places, and, as the public parks are for the benefit of all the citizens, the pleasure of a few should not be allowed to imperil the safety of the vast majority of visitors who do not, or cannot, ride in motor-vehicles.

WATER BASINS

On the first day of December, 1900, the water in Hobbs Brook Reservoir was three feet and seven-tenths (3.7) below high water mark; Stony Brook was overflowing the dam, and Fresh Pond was about two feet below high water mark. On the first day of December, 1901, the water in Hobbs Brook Reservoir was one foot and nine inches below

high water mark; Stony Brook was overflowing the dam; and the water in Fresh Pond was about two feet below high water mark, as it was a year ago. The overflow at Stony Brook dam, which has necessarily run to waste into Charles River, for the year ending November 30, 1901,

amounted to	6,141,300,000 gallons.
The overflow for the previous year was . .	4,447,100,000 "
Showing an excess this year of . . .	1,694,200,000 gallons.

The overflow for the past year is more than two years' supply, based on the present amount of consumption.

RAIN-FALL.

The total rain-fall for the year at Hobbs Brook was 43.72 inches, at Stony Brook 46.77 inches, and at Fresh Pond 46.20 inches.

The annual rain-fall at Fresh Pond during the last ten years is as follows:—

1892	44.85
1893	40.49
1894	35.85
1895	47.12
1896	38.82
1897	42.53
1898	52.42
1899	37.28
1900	46.89
1901	46.20
Average	43.25

The rain-fall of the last two years has been well above the average, but the foregoing table would seem to indicate the probability of a dry year in 1902 or 1903.

CONSUMPTION OF WATER.

The total consumption of water for the year ending December 1, 1901, was	2,785,156,440 gallons.
During the year ending December 1, 1900, the total consumption was	2,651,277,240 "
An increase of	133,879,200 gallons

During the past year, the pressure of water in the City has been increased about ten pounds, by the adjustment of the regulator valves in the forty-inch distributing main, and this increase of pressure has necessarily increased the total consumption; each opened faucet deliver-

ing more water in the same time, and each leak in main or service pipe contributing a larger item of waste. Consequently the above figures are not as favorable as those of the preceding year.

The comsumption of the year 1899 however was . . .	2,882,570,430 gallons.
So that the consumption of 1901, namely	2,785,156,440 "
was not so large as that of 1899 by	97,413,990 gallons.

WATER METERS.

The total number of meters now in use is one thousand eight hundred ninety-eight (1,898), of which one thousand seventy (1,070) were set this year, in accordance with the vote of the City Council, appropriating the sum of $10,000 for the purpose of extension of the meter system. The Board earnestly recommend the appropriation of a similar or larger sum for the ensuing year, for the reasons already given in the last annual report. Many water-takers prefer to have water meters attached to their supplies, and have petitioned the Board to that effect, and, so far as they were able, the Board have invariably granted the requests of these water-takers. Unless, however, a suitable appropriation shall be made, the Board will be compelled to disappoint a great many applicants, as they have in several cases been obliged to do heretofore, for want of a sufficient number of meters. The system seems to be growing in favor with the water-takers, especially since the City Council, on the recommendation of the Board, during the past year, reduced the minimum rate for metered water to five dollars, thus making it possible for economical consumers of water to make a considerable saving in the amount of their water bills, which they could not do under the former minimum rate of fifteen dollars.

We meet evidences on every hand that the meter system is constantly growing in popularity. In view of the fact that the general use of meters is recommended by the Chief Engineer of the Metropolitan Board, and that the Water Boards of the different cities of the Commonwealth who have adopted a meter system, in whole or in part, unanimously favor that method of distributing water, it is probable that, within a few years, every city in the Commonwealth, including those embraced in the Metropolitan district, will have adopted the system, either as a matter of necessity, to prevent waste, or as a matter of choice, in order to distribute equitably among the water-takers the burden of the expense of maintenance.

Respectfully submitted,

WILLIAM B. DURANT,
GEORGE H. HOWARD,
STILLMAN F. KELLEY,
WELLINGTON FILLMORE,
EDMUND H. STEVENS,

Cambridge Water Board.

REPORT OF THE WATER REGISTRAR

WATER REGISTRAR'S OFFICE,
CAMBRIDGE, December 5, 1901.

To the Cambridge Water Board:—

GENTLEMEN:—In compliance with the requirements of the City Ordinance I present the thirty-seventh annual report of the operations of this department showing the receipts, expenditures and abatements, together with a statement of the number of water takers, etc., for the year ending November 30, 1901.

Amount of bills remaining unpaid November 30, 1900:—

Water rates	$141 55
Meter rates	59 00
Supplies and repairs	561 71
Off and on	134 00
Seals	6 25
Maintenance account	726 30
Construction account	76 38

Amount of bills placed in hands of City Treasurer for collection from November 30, 1900, to November 30, 1901:—

Water rates	$216,596 84	
Meter rates	110,174 36	
Supplies and repairs	5,698 88	
Off and on	649 00	
Rents	168 00	
Seals	153 00	
Maintenance account	2,228 99	
Construction account	15 01	
Total bills		$337,389 27

There has been collected—

Water rates	$213,493 04
Meter rates	109,380 25
Supplies and repairs	5,253 08
Off and on	628 00
Rents	168 00
Seals	146 00
Maintenance account	2,561 38
Construction account	15 01

There has been abated :—

Water rates, off and on, and seals, supplies and repairs, and Construction account	$3,793 75	

There remains uncollected :—

Water rates	$78 05	
Meter rates	350 29	
Supplies and repairs	1,004 51	
Off and on	118 00	
Seals	6 00	
Maintenance account	393 91	
		$337,389 27

EXPENDITURES.

Construction (General account)	$32,198 71	
Maintenance (General account)	79,239 18	
		$111,437 89

ABATEMENTS.

Water rate bills to the amount of	$3,714 37	
Supply and repair bills to the amount of	3 00	
Construction bills to the amount of	76 38	
		$3,793 75

REFUNDS.

Water rates to the amount of	$2,405 28	
Which amount deducted from receipts	322,873 29	
Leaves net receipts for water	320,468 01	
Add off an on, fines, rents, seals and Maintenance account	3,503 38	
Makes net receipts of rates, fines, etc.		$323,971 39

OFF AND ON.

Water has been shut off for non-payment of rates, or per order on account of vacancy, and seals have been applied to fixtures by request of owners, as follows :—

Water shut off in 1901	701
Supplies let on, shut off in 1901	522
Supplies let on, shut off in previous years	109
New supplies let on	175
Seal locks applied to fixtures in 1901	881
Seal locks removed, put on in 1901	467
Seal locks removed, put on in previous years	529

Statement of yearly revenue received from water rates since the purchase of the works by the City :—

From April 28, 1865, to December 1, 1865	$32,367 19
From December 1, 1865, to December 1, 1866	40,073 27
From December 1, 1866, to December 1, 1867	53,733 62
From December 1, 1867, to December 1, 1868	63,747 42
From December 1, 1868, to December 1, 1869	76,149 30
From December 1, 1869, to December 1, 1870	92,605 95
From December 1, 1870, to December 1, 1871	111,782 65
From December 1, 1871, to December 1, 1872	127,201 30
From December 1, 1872, to December 1, 1873	146,117 32
From December 1, 1873, to December 1, 1874	153,634 27
From December 1, 1874, to December 1, 1875	138,880 37
From December 1, 1875, to December 1, 1876	179,166 76
From December 1, 1876, to December 1, 1877	154,843 59
From December 1, 1877, to December 1, 1878	157,443 91
From December 1, 1878, to December 1, 1879	164,681 90
From December 1, 1879, to December 1, 1880	173,325 49
From December 1, 1880, to December 1, 1881	170,062 73
From December 1, 1881, to December 1, 1882	177,430 80
From December 1, 1882, to December 1, 1883	179,361 89
From December 1, 1883, to December 1, 1884	161,526 27
From December 1, 1884, to December 1, 1885	185,544 36
From December 1, 1885, to December 1, 1886	199,404 43
From December 1, 1886, to December 1, 1887	204,748 64
From December 1, 1887, to December 1, 1888	211,156 27
From December 1, 1888, to December 1, 1889	221,124 70
From December 1, 1889, to December 1, 1890	231,116 32
From December 1, 1890, to December 1, 1891	227,054 53
From December 1, 1891, to December 1, 1892	237,527 08
From December 1, 1892, to December 1, 1893	242,219 78
From December 1, 1893, to December 1, 1894	250,032 71
From December 1, 1894, to December 1, 1895	268,813 62
From December 1, 1895, to December 1, 1896	281,030 00
From December 1, 1896, to December 1, 1897	291,457 62
From December 1, 1897, to December 1, 1898	297,129 78
From December 1, 1898, to December 1, 1899	302,569 00
From December 1, 1890, to December 1, 1900	319,479 37
From December 1, 1900, to December 1, 1901	320,468 01

Comparative Statement.

	1900		1901	
Construction Account. (Hobbs Brook Reservoir.)				
Received.				
From bonds issued	$9,500 00			
		$9,500 00		
Expended.				
Construction of reservoir, land settlement, etc.	$2,585 65			
Services of City Solicitor	500 00			
Balance of appropriation	6,414 35			
		$9,500 00		
Construction Account. (Fresh Pond Reservoir.)				
Received.				
From bonds issued	$500 00			
		$500 00		
Expended.				
For work at Fresh Pond	$55 25			
Balance of appropriation	444 75			
		$500 00		
Construction Account. (General.)				
Received.				
From bonds issued	$20,000 00		$30,000 00	
From premium on bonds	1,960 80		1,530 00	
From sale of pipe, fittings, etc.	62 10			
From balance of 1900			14,575 52	
From sale of old material, etc.			91 39	
		$22,022 90		$46,196 91
Expended.				
Sundry bills and pay rolls	$16,999 60		$32,198 71	
Balance of appropriation	5,023 30			
Balance to credit of Construction account			13,998 20	
		$22,022 90		$46,196 91
Supply Account.				
Received.				
From pipe and labor on supplies	$5,404 25			
		$5,404 25		
Expended.				
Sundry bills for stock and labor		$5,739 73		
Excess of expenditures		$335 48		
Maintenance Account.				
Received.				
From "Rates, fines, etc."	$320,612 37		$321,410 01	
From sale of grass, old materials, etc.	3,082 73			
Accrued interest on water bonds sold	61 25			
From sale of shrubs, grass, etc.			2,561 38	
Supply and repair account			5,253 08	
		$323,756 35		$329,224 47
Expended.				
Care and repairs	$64,186 26			
Interest on water debt	127,179 00		$127,109 00	
Sinking fund requirements	114,523 50		119,703 75	
Rent of offices	3,200 00			
Care and repair, pipes and fittings			79,239 18	
Ice for drinking fountains			447 11	
Abatement of Construction bill			76 38	
		309,088 76		326,575 42
Excess of receipts		$14,667 59		$2,649 05

COMPARATIVE STATEMENT.—*Continued.*

	1900		1901	
Maintenance account, excess of receipts	$14,667 59			
Supply account, excess of expenditures	335 48			
Excess of total receipts over total expenditures		$14,332 11		
Maintenance account, excess of receipts				$2,649 05

The excess of receipts shown above, amounting to $2,649.05 has been carried to the sinking fund as required by law.

In addition to the manufactories, business blocks, houses, etc., supplied through meters, water is supplied to 19,630 families, 751 stables, 2,481 horses, 131 cows, 263 shops, and 594 offices and stores, by the following fixtures, viz:—

23,136 faucets,
8,760 wash basins,
12,056 wash tubs,
7,840 bath tubs,
258 slop closets,
20,047 pan closets,
4 hopper closets,
52 urinals,
10 yard hydrants,
5 fountains,
28 tumbler washers,
2,068 hand hose,
17 motors.

Also,

978 fire hydrants (beside 19 on private premises).
8 fire reservoirs.
28 drinking fountains in public squares.
59 street watering standpipes.
4 public sanitaries.

The above schedule of fixtures does not include those in schoolhouses, engine houses, police stations, and other City buildings, or where the use of water is covered by meter.

The usual house-to-house inspection has been made with very satisfactory results.

Respectfully submitted,

WALTER H. HARDING,
Registrar.

ANNUAL STATEMENT OF THE WATER REGISTRAR TO THE COMMITTEE ON ACCOUNTS, DECEMBER 1, 1901

Water rates unpaid November 30, 1900	$200 55	
Supplies and repairs unpaid November 30, 1900	561 71	
Off and on bills unpaid November 30, 1900	134 00	
Seal bills unpaid November 30, 1900	6 25	
Maintenance bills unpaid November 30, 1900	726 30	
Construction bills unpaid November 30, 1900	76 38	
		$1,705 19

Bills placed in the hands of the City Treasurer for collection from December 1, 1900, to December 1, 1901 :—

Water rates from annual ledgers	$210,702 00	
Water rates from fractional ledgers	5,894 84	
Water rates from meter ledger	110,174 36	
Off and on water	649 00	
Seals	153 00	
Rent	168 00	
Supply and repair bills	5,698 88	
Maintenance bills	2,228 99	
Construction bills	15 01	
Premium on $30,000—Water bonds sold	1,530 00	
		$337,214 08
Total bills		$338,919 27

There has been collected :—

Annual ledgers	$208,207 90	
Fractional ledgers	5,285 14	
Meter ledger	109,380 25	
Off and on ledger	628 00	
Rent ledger	168 00	
Seals	146 00	
Maintenance account	2,561 38	
Construction account	15 01	
Supply and repair bills	5,253 08	
Premium on bonds sold	1,530 00	
Total collections		$333,174 76

There has been abated :—

Water rates, off and on, seals, etc.	$3,793 75

There remains uncollected:—

Water rates	$428 34		
Supplies and repairs	1,004 51		
Off and on	118 00		
Seals	6 00		
Maintenance account	393 91		
		5,744 51	
Total bills for collection		$338,919 27	
Less abated	$3,793 75		
Less refunded	2,405 28		
Less unpaid	1,950 76		
		$8,149 79	
Net receipts			$330,769 48

Attest: WALTER H. HARDING,
Registrar.

CAMBRIDGE, December 10, 1901.

I have examined the accounts of the Water Registrar and find that they correspond in the amounts collected, abated, refunded and uncollected with the statement submitted by the City Treasurer and verified by the City Auditor.

STILLMAN F. KELLEY,
Committee on Accounts.

CITY OF CAMBRIDGE,
OFFICE OF CITY TREASURER,

December 2, 1901.

To the Cambridge Water Board:—

GENTLEMEN:—I give you herewith a record of the transactions between the Water Office and the City Treasurer's Office during the year ending November 30, 1901.

Gross collections for account of Water Works, "Water Rates," "Maintenance" and "Supply" Accounts	$335,347.12
"Abatement" certificates received and paid on "Water Rates" .	3,793.75
"Refund" certificates have been presented and paid to amount of .	2,405.28
Uncollected bills in my hands November 30, 1901, for account of "Water Rates," "Maintenance" and "Supply" Accounts . .	1,950.76
Gross collections for account of Water Works, "Construction" .	1,621.39

Very respectfully,

WM. W. DALLINGER,
City Treasurer.

I have examined the above statement and find it correct.

HARRY T. UPHAM,
City Auditor.

REPORT OF THE SUPERINTENDENT OF WATER WORKS

CAMBRIDGE, December 2, 1901.

To the Honorable Water Board of the City of Cambridge:

GENTLEMEN:—Complying with the City Ordinance, I herewith submit the twenty-seventh annual report of the Superintendent, for the year ending November 30, 1901.

CONSUMPTION.

	Gallons.
Total quantity of water consumed during the past year	2,745,156,440
Daily average water consumed during the past year	7,520,976
Quantity of water sold by meter	785,936,760
Quantity of water used for sprinkling streets	79,738,425
Quantity of water used for flushing sewers	1,250,000
Quantity of water used for cleaning sanitaries	7,500,000
Quantity of water used for drinking fountains	35,000,000
Quantity of water used for testing meters	113,595
Total	909,538,780
Leaving for domestic purposes	1,835,617,660

Number of gallons daily for each inhabitant on the total amount consumed, 80.87.

Number of gallons daily for each inhabitant on the total amount used for domestic purposes, including water for private stables, hose, public buildings and fire purposes, 54.07.

COMPARATIVE STATEMENT OF TOTAL PUMPING DURING THE PAST TEN YEARS.

Date.	Total Yearly Pumping.	Increase or Decrease.	Average Daily Pumping.	Increase or Decrease	Gallons to each inhabitant daily.
1892	1,961,362,760	183,305,987 increase	5,358,915	487,527 increase	66.00
1893	2,234,863,924	273,501,164 "	6,122,915	764,000 "	74.50
1894	2,127,878,627	106,985,297 decrease	5,829,804	293,111 decrease	69. 9
1895	2,190,781,892	62,903,265 increase	6,002,142	172,338 increase	71.65
1896	2,413,506,557	222,724,665 "	6,594,280	592,138 "	75.90
1897	2,441,340,196	27,833,639 "	6,688,603	94,323 "	76.45
1898	2,792,321,110	350,980 914 "	7,650,195	961,592 "	85.69
1899	2,882,570,430	90,249,320 "	7,897.453	247,258 "	87.16
1900	2,651,277,240	231,293,190 decrease	7,263,773	633,680 decrease	78.69
1901	2,785,156,440	133,879,200 increase	7,630,566	366,793 increase	80.87

COMPARATIVE STATEMENT OF DOMESTIC PUMPING DURING THE PAST TEN YEARS.

Date.	Domestic Yearly Pumping.	Increase or Decrease.	Average Daily Pumping.	Increase or Decrease	Gallons to each inhabitant daily.
1892	1,426,400,135	156,039,710 increase	3,897,268	416,829 increase	48.00
1893	1,668,235,574	241,835,439 "	4,570,509	673,241 "	55.61
1894	1,547,943,977	120,291,597 decrease	4,240,942	329,567 decrease	50.34
1895	1,530,152,817	17,791,160 "	4,192,199	48,743 "	50.04
1896	1,730,224,007	200,071,190 increase	4,727,388	535,189 increase	54.42
1897	1,740,357,346	10,133,339 "	4,768,102	40,714 "	54.50
1898	2,064,438,585	324,081,239 "	5,655,996	887,894 "	63.35
1899	2,085,998,805	21,560,220 "	5,715,070	59,074 "	63.08
1900	1,799,732,048	286,266,757 decrease	4,930,772	784,298 decrease	53.42
1901	1,875,617,660	75,885,612 increase	5,138,678	207,906 increase	54.07

Total amount of coal consumed (in pounds)	3,619,340
Daily average coal consumed (in pounds)	9,916
Coal consumed per million gallons pumped	1,299
Highest water elevation in Fresh Pond was on May 25	17.62
Lowest water elevation in Fresh Pond was on November 17	14.45
Average height of water in Fresh Pond	15.69
Highest water elevation in Stony Brook Reservoir was on April 8	82.54
Lowest water elevation in Stony Brook Reservoir was on February 26	78.16
Highest water elevation in Hobbs Brook Reservoir No. 1, Lincoln Street, was April 7	181.90
Lowest water elevation in Hobbs Brook Reservoir No. 1, Lincoln Street, was on November 11	180.33
Highest water elevation in Hobbs Brook Reservoir No. 2, Winter Street, was on April 8	181.85
Lowest water elevation in Hobbs Brook Reservoir No. 2, Winter Street, was on December 1, 1900	177.30
Total rainfall at Fresh Pond Pumping Station	46.20
Total rainfall at Stony Brook Reservoir	46.77
Total rainfall at Hobbs Brook Reservoir	43.72

TOTAL RAINFALL FOR THE PAST TEN YEARS.

Month.	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
December	6.78	1.23	5.23	4.43	1.90	1.63	4.31	2.00	1.30	1.74
January	4.32	1.87	3.05	3.57	2.46	3.32	4.75	3.85	4.40	1.55
February	2.46	6.43	2.91	1.07	5.62	2.36	3.61	3.99	7.34	.79
March	3.56	2.50	.84	2.68	4.37	2.66	2.03	5.94	5.10	6.89
April	.77	3.25	2.94	4.15	1.70	2.82	6.22	1.32	1.99	8 80
May	6.06	7.30	4.63	2.39	2.42	4.24	3.92	.77	5.52	6.96
June	4.23	2.18	.81	2.76	2.33	5.16	1.82	3.17	2.75	1.33
July	2.53	2.26	2.88	3.28	2.65	4.68	4.50	3.12	2.31	4.70
August	6.11	5 95	1.63	4.71	2.45	5.06	7.34	3.21	2.80	4.17
September	1.84	1.76	2.40	1.83	6.29	5.22	1.78	4.63	4.40	3.74
October	2.15	3.77	5.19	10.16	3.10	.55	7.22	3.08	3.75	2.86
November	4.04	1.99	3.34	6.09	3.53	6.83	4.92	2.20	5.23	2.67
Total	44.85	40.49	35.85	47.12	38.82	42.53	52.42	37.28	46.89	46.20

FRESH POND AND SURROUNDINGS.

The care of the grounds and roads about the pond and the propagation and care of the plants and shrubs in the nursery has continued as in past years.

On September 3rd, work was begun on continuing the grading on the west side of the Pond, from the point where it was left three years ago towards Concord Avenue. Nearly seven acres have been graded and planted, adding very much to the appearance of that part of the grounds. The work was continued until November 30th and comparatively little more remains to be done to complete that portion of the work.

The plants on the previously graded sections have made good growth and have added very much to the attractiveness of this section the past season.

The sales from the nursery the past year have amounted to eight hundred eighty dollars and forty-two cents ($880.42). All standing grass not needed by the department has been sold.

The average height of the Pond for the past year has been 15.69 feet.

A larger amount of the weeding of the shallow portions of the Pond than usual, has been necessary this year.

Two catch basins have been constructed on Huron Avenue and two near the end of Holworthy Street to prevent the wash from the streets running into the Pond.

FRESH POND RESERVOIR.

Date.	Lowest Elevation During Month.	Highest Elevation During Month.	Monthly Rainfall, Inches.	Intake Gate. 8-inch Opening. Opened.	8-inch Opening. Closed.	30-inch Opening. Opened.	30-inch Opening. Closed.
1900							
Dec. 2.....	14.88	.....	. .....	During entire		During entire	
Dec. 31.....	..... .	15.44	.....	month, 28 turns		month, 30 ins.	
Dec	.....	.....	1.74				
1901							
Jan. 27.....	15.26	.....	.....	During entire		During entire	
Jan. 17.....	.....	15.56	.....	month, 28 turns		month, 30 ins.	
Jan.....	.....	.....	1.55				
Feb. 24.....	14.81	.....	.....	During entire		During entire	
Feb. 5.....	.....	15.41	.....	month, 28 turns		month, 30 ins.	
Feb	.....	.....	.79				
Mar. 3.....	14.67	.....	.....	During entire		During entire	
Mar. 28.....	.....	15.93	.....	month, 28 turns		month, 30 ins.	
Mar	.....	.....	6.89				
Apr. 3.....	15.81	.....	.....	From 1 to 24, 28 turns		To Apr. 24, 30 ins.	Apr. 25.
Apr. 26.....	.....	17.49	..... .	From 25 to 27, 9½ turns			
Apr	.....	... ...	8.80	From 28 to 30, 5 turns			
						From May 1 to 6, 12 ins.	
May 1.....	17.07	.....	.....	From 1 to 2, 5 turns	May 14.	From May 6 to 12, 30 ins.	May 14.
May 25.....	.....	17.62	.....	From 3 to 14, 28 turns	May 20.	From May 13 to 14, 12 ins.	
May	.....	.....	6.96	From 18 to 20, 28 turns		From May 18 to 27, 6 ins.	
						From May 27 to 31, low fountain	
June 30	16.30	.....	..... .	From 7 to 30,		To June 6 low fountain	
June 1.....	.....	17.18	.....	28 turns		From June 7 30 ins.	
June	.....	.. ....	1.33				
July 28.....	15.51	.....	.....	During entire		During entire	
July 1.....	.....	16.42	.....	month, 28 turns		month, 30 ins.	
July	.....	.....	4.70				
Aug. 24.....	15.43	. .....	.....	During entire		During entire	
Aug. 8.....	.....	15.85	.....	month, 28 turns		month, 30 ins.	
Aug	.....	.....	4.17				
Sept. 29.....	15.09	.....	.....	During entire	Sept. 21	During entire	
Sept. 3.....	... .	15.78	.....	month, 28 turns	3½ hrs.	month, 30 ins.	
Sept	.....	.....	3.74				
Oct. 30.....	14.70	.....	.....	During entire	Oct. 25.	During entire	
Oct. 1	.....	15.24	. ....	month, 28 turns	2½ hrs.	month, 30 ins.	
Oct	.....	.....	2.86				
Nov. 17.....	14.45	.....	.....	During entire		During entire	Nov. 11
Nov. 29.....	.....	14.83	. ....	month, 28 turns		month, 30 ins.	4½ hrs.
Nov	.....	.. ....	2.67				

PUMPING STATION AND GROUNDS.

Engine No. 7 has been run exclusively the past year and has done the work in a very satisfactory manner. The engines and boilers are in first-class condition and have required no outlay other than the ordinary running repairs. The grounds have received the usual care.

HIGHLAND STREET RESERVOIR.

All connections with this reservoir and the distributing mains have been severed and the gates and check valves removed. The land has been surrendered to its former owners.

PAYSON PARK RESERVOIR.

The north basin of this reservoir was cleaned out early this season and a check valve placed on the mud pipe leading to the main drain. A short length of four-inch drain was laid along the foot of the slopes on the south-east corner of the south basin to carry off water that appeared to be coming through the ground.

The roadway from Common Street to Elm Street has been graded and put in good condition by the Payson Park Land Company. The sidewalks about the reservoir grounds should be graded and properly surfaced.

The buildings and the reservoir grounds are in first-class condition.

The leakage from the basin continues about the same as at the last report.

PIPE YARD.

The buildings at the yard are in need of painting and a new fence should be built along the Auburn Street side.

HIGH SERVICE.

On September 9th the pressure on the City mains was increased by the adjustment of the regulator valves so that the highest buildings on Dana Hill could be supplied from the low service, and on the 23rd of the same month the gates and check valves were opened and the high service since that date has supplied only that portion of the high land situated on the following streets:—

Agassiz Street.
Appleton Street, from Highland Street to beyond Hutchinson Street.
Arlington Street.
Avon Hill Street.
Bates Street.
Bellevue Avenue.
Bellevue Avenue, west.
Buena Vista Park.
Garden Street, from Huron Avenue to Linnaean Street.
Highland Street, from Reservoir Street to Appleton Street.
Hillside Avenue.
Holly Avenue.
Humboldt Street.
Huron Avenue, from Appleton Street to Raymond Street.
Lancaster Street.
Linnaean Street
Mount Pleasant Street.
Mount Vernon Street.
Raymond Street, from Linnaean Street to Walden Street.
Reservoir Street, from Highland Street.
Upland Road, from Richdale Avenue to Huron Avenue.
Vassal Lane, from Huron Avenue.
Vincent Street.
Walnut Avenue.
Washington Avenue.

LIST OF CHECK VALVES IN USE.

Appleton Street at Hutchinson Street.
Avon Hill Street and Linnaean Street.
Garden Street and Linnaean Street.
Mount Vernon Street, one hundred feet west from Massachusetts Avenue.
Raymond Street and Linnaean Street.
Vincent Street at Walden Street.

LEAKAGE.

Twenty-three hundred two (2,302) leaks have been repaired during the year. They were discovered as follows:—

One hundred forty-two (142) on supplies in street.
One (1) on thirty-inch main. (See Stony Brook Pipe Line for account of this leak.)
One (1) on twenty-four inch main.
One (1) on twenty-inch main.
One (1) on twelve-inch pumping main.
Three (3) on eight-inch mains.
Fourteen (14) on six-inch mains.
Five (5) on four-inch mains.
One (1) on three-inch main.
Eleven (11) on hydrants.
Fourteen (14) on gates.
Twenty-two (22) on meters.
Two (2) on street watering standpipes.
One (1) on fountain.
Two thousand eighty-three (2,083) on premises.

Of the above leaks, two thousand eighty (2,080) were discovered by inspectors while making the annual canvass. They were reported as follows:—

Fifteen hundred eighty-three (1,583) on water closets.
Three hundred seventy-nine (379) on faucets.
Thirty-four (34) on basins.
Twenty-eight (28) on pipes.
Twenty-one (21) on tanks.
Fifteen (15) on stop and waste valves.

Eleven (11) on bath tubs.

Six (6) on wash trays.

Three (3) on sill cocks.

Ten (10) leaks on supplies in the street have been caused by electrolysis. The cost of repairs, one hundred sixty-nine dollars and seventy-four cents ($169.74) has been charged to the Boston Elevated Railway Company.

TABLE SHOWING A GAIN OR LOSS IN TOTAL CONSUMPTION FOR THE YEAR 1901 OVER THE YEAR 1900.

	Total Consumption 1901.	Total Consumption 1900.	Increase or Decrease, + or —.
December	220,410,520	204,553,360	+15,857,160
January	239,847,080	243,173,920	—3,326,840
February	235,592,720	199,942,120	+35,650,600
March	222,808,960	229,562,080	—6,753,120
April	208,326,800	201,539,360	+6,787,440
May	207,740,720	195,051,120	+12,689,600
June	236,636,840	225,405,400	+11,231,440
July	255,524,280	274,256,400	—18,732,120
August	246,125,000	226,855,640	+19,269,360
September	231,464,200	224,104,760	+7,359,440
October	250,991,840	224,248,580	+26,743,260
November	229,687,480	202,584,500	+27,102,980
Total	2,785,156,440	2,651,277,240	133,879,200

MAIN PIPE.

Nine thousand eight hundred seventy-six (9,876) feet of main pipe have been laid during the year; of the above amount four thousand one hundred twenty-six (4,126) feet were for extension and five thousand seven hundred fifty (5,750) feet were for renewal. The sizes were from two-inch to twelve-inch.

In Ellery Street from Broadway to Cambridge Street a new eight-inch main has been laid to replace the old four-inch laid in 1867, and six-inch laid in 1869.

In Eighth Street from Spring Street the laying of the new six-inch main pipe does away with the old three-inch laid in 1867.

In Garden Street from Bond Street to Concord Avenue a new eight-inch main supplies the district formerly cared for by the six-inch laid in 1874, 1870 and 1868.

In Massachusetts Avenue from Trowbridge Street to Quincy Square the old ten-inch pipe laid in 1867 has been removed and a new ten-inch laid and cross connected at Putnam Square.

In Quincy Street from Broadway, south, the old four-inch pipe laid in 1875 has been removed and a new six-inch laid.

In Sparks Street from Brattle Street a new six-inch main has been laid to take the place of the old four-inch laid in 1867.

In Walker Street from Garden Street to Shepard Street a new six-inch main has been laid. The old four-inch which has supplied this territory was laid in 1870, 1871 and 1872.

In Ware Street from Broadway a new six-inch main has been laid to replace the old four-inch which was laid in 1870.

In Mount Auburn Street the old four-inch pipe from Putnam Avenue to Holyoke Street has been abandoned and the mains in the cross streets have been connected to the twenty-four inch main.

During the construction of the sewer in Belmont Street it was necessary to chain up the pipe for the protection of the Sewer Department.

MAIN PIPE LAID, NUMBERS OF GATES AND FIRE HYDRANTS.

	Iron Pipe.		Gates.		Hydrants.	
	Length.	Size.	No.	Size.	No.	Kind.
Appleton St., at Highland.	26½	6	1	6	.....	.....
Austin St., corner Temple	.....	.....	.....	.....	1	Chapman.
Brattle St., at Longfellow Park	10	6	1	6	1	Chapman.
Brewster St., from Appleton	112	4	.....	.....	.....	.....
" at Appleton	.....	.....	1	6	.....	.....
" at Sparks	13	4	1	4	.....	.....
Bolton St., at turn	6	6	.....	.....	1	Chapman.
Brookline St., at Granite	.....	.....	1	6	.....	.....
Chauncy St., at Garden	16	6	1	6	.....	.....
DeWolf St., from Mt. Auburn to Bow	131½	6	.....	.....	.....	.....
" at Mt. Auburn	.....	.....	1	6	.....	.....
" at Bow	6	6	.....	.....	1	Chapman.
Divinity Ave., from Kirkland	703	6	.....	.....	.....	.....
" at Kirkland	.....	.....	1	6	.....	.....
" 331 ft. from Kirkland	20	6	.....	.....	1	Chapman.
Ellery St., at Broadway	7	6	.....	.....	1	Chapman.
" 350 ft. from Broadway	7	6	.....	....	1	Chapman.
" from Cambridge to Broadway	780½	8	.....	.....	.....	.....
" at Cambridge	7	6	1	6	.....	.....
Eighth St., from Thorndike	156	6	.....	.....	.....	.....
" at Thorndike	.....	.....	1	6	.....	.....
" from Spring	104½	6	.....	.....	.....	.....
" at Spring	.....	.....	1	6	.....	.....
Ellsworth Ave., at Broadway	.....	.....	.....	.....	1	Chapman.
Front St., from Winsor to Mass. Ave	181	4	.....	.....	.....	.....
" at Winsor	.....	.....	1	4	.....	.....
Grant St., corner DeWolf	.....	.....	.....	.....	1	Chapman.
Garden St., from Bond to Concord Ave	1,288½	8	.....	.....	.....	.....
" at Bond	.....	.....	1	8	.....	.....
" at Chauncy	10	6	.....	.....	.....	.....
" at Shepard	10	6	.....	.....	1	Chapman.
Granite St., from Magazine	257	4	.....	.....	.....	.....
" at Magazine	.....	.....	1	4	.....	.....
" from Pearl to Brookline	575½	6	.....	.....	.....	.....
" at Rockingham	6	6	.....	.....	1	Chapman.
Gorham St., at Hammond	36	6	.....	.....	1	Chapman.
Highland St., at Appleton	5	10	1	10	.....	.....
Highland St	8	12	.....	.....	.....	.....
Jefferson St., corner Harding	.....	.....	.....	.....	1	Flush.
Kirkland St., and Kirkland Pl	.....	.....	1	4	.....	.....
Locust Court from Cushing	107	2	.....	.....	.....	.....
Locust St., at Cushing	.....	.....	1	6	.....	.....
Longfellow Park from Brattle	228	4	.....	.....	.....	.....
" at Brattle	.....	.....	1	4	.....	.....

MAIN PIPE LAID, NUMBERS OF GATES AND FIRE HYDRANTS.—*Continued.*

	Iron Pipe.		Gates.		Hydrants.	
	Length	Size.	No.	Size.	No.	Kind.
Marcella St., from Berkshire to Portland	328	6				
" at Berkshire			1	6		
" at Portland			1	6		
Mass. Ave at Beech	10	6			1	Chapman.
" from Quincy Sq. to Trowbridge	1,112½	10				
" near Arrow	33	6			1	Chapman.
" at Remington			1	10		
" near Quincy	10	6			1	Chapman.
Murdock St., at Hampshire			1	4		
Norris St					1	Chapman.
Norumbega St., from Belmont	208	6				
" at Belmont			1	6		
" at Belmont	6	6			1	Chapman.
Oxford St., at Kirkland			1	6		
Osborn St., corner Main			1	6	1	Chapman.
Pearl St	13	6				
Plympton St., from Mt. Auburn to Bow	41	6				
" at Mt. Auburn			1	6		
" at Bow	6	6			1	Chapman.
Putnam Sq., at Mass. Ave	24	10				
Quincy St., from Broadway	468	6				
" at Broadway	6	6			1	Chapman.
Remington St., at Mass. Ave	10	6				
" 155 ft. from Harvard	6	6			1	Chapman.
Rice St., 540 ft. from Mass. Ave					1	Flush.
Rockingham St., at Henry			1	4		
" at Granite	12	4	1	4		
Sparks St., at Brewster	7	6			1	Chapman.
" from Huron Ave	87	6				
" at Huron Ave			1	6		
" from Brattle	640	6				
Walker St., from Garden to Shepard	844½	6				
" at Garden	16	6	1	6		
" at No. 35	6	6			1	Chapman.
Western Ave., at Putnam Ave					1	Flush.
Ware St., from Broadway	364	6				
Walden St., at Wood	8½	6			1	Chapman.
Waverly St					1	Coffin.
Whittemore Ave., from Madison Ave	293	6				
Yorktown St., from Mass. Ave	499	6				
" at Mass. Ave			1	6		

The sizes, lengths and weights of cast iron pipe laid are as follows :—

Size.	Length in Feet.	Weight in Tons.
12-inch	8	.31
10-inch	1,141	40.24
8-inch	2,069	44.33
6-inch	5,748	82.11
4-inch	803	6.81

In addition to the regular annual house to house inspection and of gates, hydrants, blow-offs, street watering standpipes and service boxes, a general inspection of the main pipes has been made under the direction of Assistant Superintendent Parker, and the main pipes in the entire City have been blown off. It was necessary to do this during the night in order not to interfere with the day consumption.

SUPPLIES.

Two hundred one (201) supplies have been laid during the year for new buildings and premises heretofore not connected directly with the street mains.

The total number of supplies laid to date:—fourteen thousand four hundred eight (14,408).

An account of the number and size of new supplies will be found in the recapitulation table on page 38.

One hundred twenty-nine (129) supplies have been furnished with new sidewalk shut-off boxes.

Two hundred ninety-one (291) supplies have been renewed. Previous to the resurfacing of Mt. Auburn Street and Bridge Street by the Street Department, the Water Department examined and renewed to the property line in Mt. Auburn Street thirty-five (35), and in Bridge Street forty-nine (49) supplies; these numbers are included in total number renewed. Following will be found the number of supply renewals made while renewing the main pipe; the total number, sixty-six (66), is included in the foregoing total:—fourteen in Ellery Street; three in Eighth Street; two in Garden Street; ten in Massachusetts Avenue; three in Quincy Street; seven in Sparks Street; twenty-four in Walker Street; eight in Ware Street.

In the streets following, a number of the supplies have been offset for the accommodation of the new sewers recently built; Antrim Street, Belmont Street, Bolton Street, Erie Street, Eustis Street, Hampshire Street, Harris Street, Montgomery Street and Sherman Street.

The temporary supplies laid for the use of the Sewer Department in its construction of sewers have been removed.

All the supplies in Mt. Auburn Street are now fed from the twenty-four inch, the old four-inch having been abandoned.

In Prison Point Street all the old pipes which have formerly supplied the Boston & Maine Railroad Company have been removed.

In Clark Street from School Street to Washington Street the supplies have been moved to conform to the changes in the street lines.

Following is the list of establishments having fire protection from the City of Cambridge:—

American Rubber Co.,	Binney street,	Two 6-in.
American Net & Twine Co.,	Third street,	6-in.
Barber Asphalt Paving Co.,	First street,	6-in.
Bay State Metal Works,	Harvard street,	6-in.
Blacker & Shepard,	Osborn street,	2-in.
Blake, Geo. F., Manufacturing Co.,	Third street,	4-in.

Boston Book Binding Co.,	Mt. Auburn street,	6-in. & 4-in.
Boston Elevated Railway Co.,	Baldwin street,	2-in. & 4-in.
" " " "	Cambridge street,	Two 2-in.
" " " "	Pelham street,	3-4-in.
" " " "	Massachusetts ave.,	4-in.
" " " "	Mt. Auburn street,	2-in. & 4-in,
" " " "	Murray street,	4-in.
" " " "	River street,	4-in.
Boston & Maine Railroad Co.,	Bridge street,	4-in.
" " " "	Bridge street,	6-in.
" " " "	Prison Point street,	4-in.
Boston Woven Hose & Rubber Co.,	Portland street,	10-in. & 8-in.
Cambridge Gas Co.,	Third street,	6-in.
Cambridge Mutual Fire Insurance Co.,	Massachusetts ave.,	2-in.
Chelmsford Foundry Co.,	Portland street,	2-in.
Davis, Curtis & Co.,	Broadway,	6-in.
Davis, James C. & Co.,	Broadway,	4-in. & 6-in.
Dover Stamping Co.,	Pleasant street,	6-in.
Dow, John C. & Co.,	Portland street,	2-in.
Forgarty & Daly,	Massachusetts ave.,	4-in.
Ginn & Co.,	First street,	Two 6-in.
" "	Athenæum street,	One 8-in.
Goepper Bros.,	Ninth street,	1 1-2-in.
Harvard College,	H'v'rd Union, Harvard st.,	4-in.
" "	Memorial Hall, Camb. st.,	4-in.
" "	Observatory, Concord ave.,	1-in.
" "	Semitic Mus.,Divinity ave.,	4-in.
Holy Ghost Hospital for Incurables,	Hovey avenue,	3-in.
Houghton, Mifflin & Co.,	Albro & Blackstone sts.,	6-in.
" " "	River street,	6-in.
Irving & Casson,	Otis street,	6-in.
" "	Thorndike street,	6-in.
" "	Thorndike street,	2-in.
Ivers & Pond Piano Co.,	Albany street,	4-in.
Jones, C. L. & Co.,	Pearl street,	4-in.
Keeler & Co.,	Thorndike street,	1-in.
Kendall, Edward, & Sons,	Main street,	2-in.
Lamb & Ritchie,	Albany street,	6-in.
Laminar Fibre Co.,	Tannery street,	2-in.
Liquid Air,Power & Automobile Co.,	Albany street,	4-in.
Lockhart, William L.,	Bridge street,	1 1-2-in.
Luke, E. H., Est. of,	Main street,	2-in.
Mason & Hamlin Co.,	Broadway,	Two 6-in.
Massachusetts Athletic Association,	Lansdowne street,	4-in.
Met. Storage Warehouse Co.,	Massachusetts ave.,	6-in.
Middlesex Co'y, House of Correction,	Second & Spring streets,	6-in.
National Biscuit Co.,	Franklin street,	4-in.
" " "	Green street,	8-in.
National Linseed Oil Co.,	Fifth street,	6-in.
North Packing & Provision Co.,	Winter street,	6-in.
O'Brien, John (Rev.)	Seventh street,	4-in.
Page, George G., Box Co.,	Hampshire street,	6-in. & 4-in.
Petterson, Oscar G.,	483 Main street,	4-in.
Pi Eta Club,	Winthrop street,	2-in.
Porter, Henry S.,	Kinnaird street,	4-in.
Reardon, John, & Sons, Corporation,	Waverly street,	4-in.

Revere Sugar Refinery,	Water street,	6-in.
Reversible Collar Co.,	Putnam avenue,	6-in.
Russell, Lucy J.,	29 Elm street,	1 1-2-in.
Sawyer, Howard M., & Son,	Thorndike street,	4-in.
Seavey Manufacturing Co.,	Third street,	6-in.
Seelye Manufacturing Co.,	First street,	4-in.
Simplex Electrical Co.,	Auburn street,	3-in.
" " "	Auburn street,	6-in.
" " "	Franklin street,	6-in.
Slavens, Luther R.,	Broadway,	2-in.
Smart, Charles E.,	Main street,	2-in.
Sparrow, H. F., & Co.,	Hampshire street,	6-in.
Speare's, Alden, Sons & Co.,	Rogers street,	4-in.
" " " "	Sixth street,	4-in.
Standard Oil Co.,	Potter street,	6-in.
Thayer, Henry, & Co.,	Broadway,	6-in.
Tower, Sylvester, & Son,	Broadway,	4-in.
University Associates,	Linden street,	4-in.
University Press,	Nutting Place,	6-in.
Wetmore, C. D.,	Claverly Hall, Mt. Auburn st.,	4-in.

DRINKING FOUNTAINS.

There are twenty-eight (28) drinking fountains in use; four (4) of these are ice water drinking fountains of Jenk's manufacture.

These ice water drinking fountains were supplied with ice from June 13th to October 1st at a cost of four hundred forty-seven dollars and eleven cents ($447.11).

This date (June 13th) is one month later than usual but as there had been no appropriation made for this expenditure the Water Board did not feel authorized to incur the expense until June, when the City Council made an appropriation for five hundred dollars ($500.00).

The fountains in the locations following have been repaired: Brookline Street at Putnam Avenue, Central Square, Kendall Square, Massachusetts Avenue and Peabody Street.

STREET WATERING STANDPIPES.

No addition has been made during the year to the number of standpipes; there are fifty-nine (59) in use.

When the standpipes were put into commission in the spring the cost of repairs on valves made necessary by exposure to frost was met by the Street Department, it being considered responsible for the negligence of its drivers.

The standpipes have been removed from Cambridge Street at Oak Street and set on Cambridge Street near Inman Square and from Henry Street at Brookline Street and set on Henry Street about one hundred fifty-five (155) feet from Brookline Street.

Outside of the annual inspection and repair of street watering standpipes, the standpipes in the following locations have received additional repairs: Broadway and Sixth, Broadway and Third, Prison Point Street, Putnam Avenue and Magee, Putnam Avenue and River, Massachusetts Avenue at Dudley Street, Massachusetts Avenue at Franklin Street.

GATES.

Thirty-six (36) gates have been set during the year as follows:

Twenty-one (21) on extension of main pipes. (See tables on pages 238 and 248).

Ten (10) on renewal of main pipes. (See above tables).

Five (5) on new supplies. (See table on page 248).

In the locations following the gates have been repaired: Ash Street at Acacia Street, Main Street at Osborn Street, Massachusetts Avenue at Walden Street, Pleasant Street at River Street, Reservoir Street, Washington Street at Hillside Avenue.

A thorough inspection of the gates has been made and their locations, carefully marked.

BOXES.

The total number of boxes set during the year was two hundred seventy-seven (277).

Twenty-seven (27) iron and six (6) small wooden boxes have been set on the new extension and renewal work.

Ten (10) iron and nine (9) small wooden boxes have been set on new supply work.

Forty-nine (49) boxes have been set in place of worthless ones removed as follows: thirty-eight (38) iron; two (2) hydrant; one (1) meter; two (2) large wooden and six (6) small wooden.

One hundred seventy-five (175) meter boxes and one (1) large wooden box have been used in connection with the setting of meters.

In seven (7) locations the boxes have been repaired.

In one (1) location on Hovey Avenue a meter box has been removed

In twenty-one (21) locations the gate boxes have been raised; in fourteen (14) locations the gate boxes have been lowered and in six (6) locations the gate boxes have been reset to conform to the street elevations.

HYDRANTS.

Total number of hydrants in use at date, November 30, 1901, is nine hundred seventy-eight (978).

Twenty-five (25) posts (Chapman) and three (3) flush hydrants have been set during the year. (See table of "main pipe laid, hydrants set" etc. on page 238.)

Five (5) posts and twelve (12) flush hydrants have been removed during the year as follows: Boston post from Austin Street corner. Temple Street; Boston post from Osborn Street corner Main Street; Chapman post from Ellsworth Avenue at Broadway; Coffin post from Grant Street at DeWolf Street; Coffin post from Norris Street, midway; Perkins post from Waverly Street (this hydrant was broken by a team); and flush hydrants have been removed from Beech Street and Massachusetts Avenue; Broadway at Ellery Street; Broadway at Quincy Street; Ellery Street, three hundred seventy-five (375) feet from Broadway; Garden Street corner Walker Street; Massachusetts Avenue near Remington Street; Mt. Auburn Street opposite Athens Street; Mt. Auburn Street at Bow Street; Mt. Auburn Street corner Dunster Street; Rice Street, five hundred forty (540) feet from Massachusetts Avenue; Walker Street, two hundred seventy (270) feet from Shepard Street; and Western Avenue at Putnam Avenue.

Total number and kind of hydrants in use are as follows:—

Boston	157
Chapman	481
Coffin	41
Flush	119
Holyoke	86
Perkins	94
Total	978

Hydrants in the locations following have been raised: — Hovey Avenue, Hampshire and Amory Streets; in Douglass Street at Austin Street the hydrant has been lowered.

Posts have been set to protect the hydrants located at the corner of Bent Street and Ninth Street, and Bent Street and Fifth Street.

The hydrants located as follows, have received necessary repairs:— Gore Street at Seventh Street; Harvard Square opposite Dunster Street; Massachusetts Avenue at Frank Street; Ninth Street and Bent Street; Tannery Street at Cambridge City Home; Thorndike Street at House of Correction (this hydrant has been repaired twice at the County's Expense); University Press; Walden Street at Raymond Street.

The Coffin hydrant in Portland Street, near Main Street, and the Boston hydrant in Brookline Street near Henry Street have been relocated.

The annual inspection of hydrants has been made.

METERS.

There have been set ten hundred seventy (1070) meters in new locations during the year.

Early this year the Board decided to place meters on as many of the dwellings in the several wards as the amount of the appropriations would warrant; accordingly a specification was prepared and bids asked for, resulting in the contract being awarded to the Hersey Manufacturing Company of Boston, for its all-composition disc meters to the number of one thousand (1,000). The work of setting them began on June 13th and to November 30th there had been set, from the list prepared by the Water Registrar under the direction of the Water Board, eight hundred thirty-nine (839) meters, in sizes from five-eighths inch to one and one-half inch, of which eight hundred thirty-six (836) were Hersey discs; one (1) Union Rotary, one (1) Lambert and one (1) Trident completed the total number on the list as follows:—

Fourteen (14) were set on Boylston Street; thirty-three (33) were set on Broadway; two hundred thirty-one (231) were set on Cambridge Street; fifteen (15) were set on Craigie Street; forty (40) were set on Garden Street; fifteen (15) were set on Harvard Street; eighty-eight (88) were set on Magazine Street; two hundred thirteen (213) were set on Massachusetts Avenue; one hundred eight (108) were set on Prospect Street; eighty-two (82) were set on Western Avenue.

The cost of the work has been ten thousand eighty-seven dollars and forty-four cents ($10,087.44), an average of twelve dollars and two cents ($12.02) per meter.

This amount is larger than it would be for other parts of the City, as a large proportion of them required setting in the sidewalk; one hundred seventy-five (175) out of the total number being so placed.

Eighty-one (81) meters were set in response to petitions received from property owners.

Since the increase of pressure in the City many old meters have been changed for smaller sizes, with good results.

We have in use at the present time eighteen hundred ninety-eight (1898) meters of the following kinds and number:

Ball & Fitts	2	Nash	12
Crown	44	Thompson	8
Empire	2	Trident	532
Gem	1	Union Rotary	46
Hersey	1,115	Weir	1
Lambert	66	Worthington	69

The number of meters on hand is one hundred sixty-four (164).

STONY BROOK.

Seven (7) cesspools and one (1) vault have been built on the water shed of this Brook the past season, making a total of sixteen (16) cesspools and eighteen (18) vaults.

In caring for this drainage we have been put to great inconvenience in not being able to have the work of removal done as promptly as was desired, and also that the expense was greater than thought necessary. Accordingly an excavating wagon and pump was purchased, and the work of cleaning is being done by this department at greatly reduced cost.

The Brook, near where it enters the basin, has been cleaned out and walled up on each side, and a portion near Kendal Green Station has also been cleaned out. There remains, however, much that would be desirable to have done at as early a date as possible.

A considerable amount of fencing has been done around the upper part of the basin and on the land near the dam.

TABLE SHOWING THE DAILY AVERAGE GALLONS, BY THE MONTH, FLOWING OVER THE WASTE WAY AT STONY BROOK.

	Gallons.	Number of Days.		Gallons.	Number of Days.
December, 1900....	12,061,290	31	June, 1901....	17,330,000	28
January, 1901....	312,903	4	July, 1901....	No overflow.	——
February, 1901...	No overflow.	——	August, 1901...	170,968	3
March, 1901....	33,848,387	22	September, 1901....	No overflow.	——
April, 1901....	74,080,000	30	October, 1901....	190,323	3
May, 1901....	62,270,968	31	November, 1901....	816,666	5

Total quantity wasted . . . . . 6,141,300,000 gallons.

Total number of days in which water wasted 157

STONY BROOK PIPE LINE.

The inspection of the gates and air valves along this line has been made.

During the early spring several leaks developed in the cut leading to the pond, and on examination it was found that the pipe, where it crosses a mud pocket and was laid on piling, had settled and several of the joints were pulled apart so as to cause leaks. The settlement was caused by the breaking of the cross timbers on which the pipe rested. New piles were driven and new cross timbers of 8-inch x 8-inch, white oak, were put in and the whole made as secure as possible. Several other leaks were found in the cut which seemed to show that the joints were not properly driven when the pipe was laid.

The expense attending this work chargeable to Maintenance was eight hundred ninety-four dollars and eighty-eight cents ($894.88). Your attention is respectfully called to the fact that there was no appropriation in the above account for such an expensive leak.

Stony Brook.			Lincoln Street Basin.			Winter Street Basin.			Rainfall.	Remarks.			
Date.	Lowest elevation reached.	Highest elevation reached.	Rainfall.	Date	Lowest elevation reached.	Highest elevation reached.	Date.	Lowest elevation reached.	Highest elevation reached.		Gates opened.	Gates closed.	Removed flash-boards.	Set flash-boards.
Dec. 30, 1900	81.06	.....	.....	Dec. 30, 1900	180.58	.....	Dec. 1, 1900	177.30	.....	.....	.....	.....	.....	.....
Dec. 6, 1900	.....	81.65	2.52	Dec. 5, 1900	.....	181.	Dec. 31, 1900	.....	178.87	2.29	.....	.....	.....	.....
Jan. 31, 1901	80.63	.....	.....	Jan. 6, 1901	180.55	.....	Jan. 1, 1901	178.90	.....	.....	.....	.....	.....	.....
Jan. 1, 1901	.....	81.16	1.42	Jan. 1, 1901	.....	180.65	Jan. 31, 1901	....	179.43	1.34	.....	.....	.....	.....
Feb. 26, 1901	78.16	.....	.....	Feb. 28, 1901	180.47	.....	Feb. 1, 1901	179.43	.....	.....	Winter st	.....	.....	.....
Feb. 1, 1901	.....	80.52	1.17	Feb. 1, 1901	.....	180.56	Feb. 18, 1901	.....	179.65	1.10	d., Feb. 26	.....	.....	.....
Mar. 1, 1901	78.66	.....	.....	Mar. 1, 1901	180.48	.....	Mar. 3, 1901	179.50	.....	.....	.....	Winter st	.....	.....
Mar. 12, 1901	.....	82.42	6.71	Mar. 27, 1901	.....	181.75	Mar. 27, 1901	.....	181.65	5.52	.....	d., Mar. 4	.....	.....
Apr. 3, 1901	81.54	.....	.....	Apr. 20, 1901	181.47	.....	Apr. 20, 1901	181.47	.....	.....	.....	.....	.....	.....
Apr. 8, 1901	.....	82.54	6.68	Apr. 7, 1901	.....	181.90	Apr. 8, 1901	.....	181.85	6.72	.....	.....	.....	.....
May 9, 1901	81.50	.....	.....	May 18, 1901	181.42	.....	May 18, 1901	181.42	.....	.....	.....	.....	.....	.....
May 21, 1901	.....	82.17	7.56	May 21, 1901	.....	181.70	May 21, 1901	.....	181.70	7.67	.....	.....	.....	.....
June 30, 1901	80.92	.....	.....	June 30, 1901	181.15	.....	June 30, 1901	181.15	.....	.....	.....	.....	.....	.....
June 1, 1901	.....	81.84	1.13	June 1, 1901	.....	181.55	June 1, 1901	.....	181.55	1.22	.....	.....	.....	.....
July 22, 1901	78.36	.....	.....	July 20, 1901	180.95	.....	July 28, 1901	180.95	.....	.....	.....	.....	July 21st	.....
July 1, 1901	.....	80.80	5.44	July 1, 1901	.....	181.15	July 1, 1901	.....	181.15	5.78	.....	.....	Rem. 1st	.....
Aug. 24, 1901	79.02	.....	.....	Aug. 23, 1901	180.75	.....	Aug. 24, 1901	180.65	.....	.....	.....	.....	.....	Aug. 8th Set 1st
Aug. 28, 1901	.....	81.10	.....	Aug. 1, 1901	.....	181.02	Aug. 1, 1901	.....	181.02	.....	.....	.....	Aug. 14th	.....
													Rem. 1st	
													Aug. 18th	
													Rem. 2d	
													Aug. 23d	
													Rem. 3d	
			4.67							3.61				Aug. 26th Set 3, 2, 1
Sept. 13, 1901	79.04	.....	.....	Sept. 28, 1901	180.36	.....	Sept. 28, 1901	180.10	.....	.....	.....	.....	Sept. 7th	.....
													Rem. 1st	
Sept. 1, 1901	.....	80.66	.....	Sept. 1, 1901	.....	180.83	Sept. 1, 1901	.....	180.80	.....	.....	.....	Sept. 9th	.....
													Rem. 2d	
													Sept. 12th	
													Rem. 3d	
													Sept. 13th	
													Rem. 4th	
													Sept. 23d	
			4.01							2.95			Rem. 5th	
Oct. 31, 1901	79.30	.....	.....	Oct. 1, 1901	180.40	.....	Oct. 31, 1901	179.70	.....	.....	.....	.....	Oct. 1st	.....
													Rem. 6th	
Oct. 17, 1901	.....	81.10	.....	Oct. 15, 1901	.....	180 65	Oct. 1, 1901	.....	180.15	.....	.....	.....	Oct. 5th	.....
													Rem. 7th	
														Oct. 15th Set 7th
			2.68							2.75			Oct. 31st	
													Rem. 7th	
Nov. 1, 1901	79.25	.....	.....	Nov. 11, 1901	180.33	.....	Nov. 24, 1901	178.92	.....	.....	.....	.....	Nov. 3d	.....
													Rem. 8th	
Nov. 26, 1901	.....	81.25	.....	Nov. 25, 1901	.....	180.80	Nov. 1, 1901	.....	179.70	.....	.....	.....	Nov. 8th	.....
													Rem. 9th	
													Nov. 13th	
													Rem. 10th	
			2.78							2.77				Nov. 25th S. 10, 9, 8, 7
Total.....			46.77							43.72				

HOBBS BROOK.

The height of water in this basin is at present 179.25 feet — 1.75 below high water. Water was drawn from here from February 26 to March 14, from July 21 to August 8, from August 14 to 26, and from September 7 to date, November 30, 1901.

It was hoped that this season would be favorable for doing quite an amount of ditching in the meadows at the upper part of the basin, but the height of the water has prevented doing as much as we had wished; however, the Brook has been partly cleaned and we are in hopes to have the ditches on the Evans farm cleaned before spring.

The brush along the fence has been cut and burned and the standing grass sold.

A twelve-inch drain from the lower side of Winter Street Dam to opposite the Stearns place has been in course of construction for the past month, more than half of the work is finished and a few weeks more should suffice to finish it.

RECAPITULATION.

NEW SUPPLIES.

	6 Inch	4 Inch	3 Inch	2 Inch	1½ Inch	1¼ Inch	1 Inch	¾ Inch	Total
Length, in feet, of pipe	344	364	35½	422	300	559½	1,740	4,481	8,246
Number of supplies	2	4	1	4	8	9	44	129	201
Number of stop and waste valves	.....	.....	.....	4	9	7	44	115	179
Number of screw cocks	.....	.....	.....	5	9	11	43	122	190
Number of sidewalk cocks	.....	.....	.....	.....	.....	8	42	113	163
Number of service boxes	.....	.....	.....	.....	.....	.....	.....	.....	161
Number of gates	1	4	.....	.....	.....	.....	.....	.....	5
Number of gate boxes	.....	....	.....	.....	.....	.....	.....	.....	10
Number of wooden boxes	.....	.....	.....	.....	.....	.....	.....	.....	9

MAIN PIPE.

	12 Inch	10 Inch	8 Inch	6 Inch	4 Inch	2 Inch	Total
Length, in feet, of pipe, extension	8	29	.....	3,179	803	107	4,126
Length, in feet, of pipe, renewals	.....	1,112	2,069	2,569	.....	.....	5,750
Total length, in feet, of pipe	8	1,141	2,069	5,748	803	107	9,876
Number of gates	.....	2	1	20	8	.....	31
Number of hydrants	.....	.....	.....	.....	.....	.....	28

COMPARATIVE TRENCHING FOR THE PAST TEN YEARS.

	Extensions.	Renewals.	Supplies.	Total Feet.	Miles.
1892	16,784½	13,628	16,013	46,425½	8.79
1893	18,380½	11,008	14,233½	43,622	8.26
1894	13,673	17,481½	17,211	48,365½	9.16
1895	11,083	15,638½	22,266	48,987½	9.27
1896	17,621	26,043	17,361	61,025	11.55
1897	11,268	36,967½	16,121½	64,357	12.19
1898	11,045½	25,397	12,186	48,628½	9.21
1899	11,051½	9,427½	13,486½	33,965½	6.43
1900	9,174	412½	6,848	16,434½	3.11
1901	4,126	5,750	8,246	18,122	3.43

Following will be found the report of the Chief Engineer of the Pumping Station.

All of which is respectfully submitted,

E. C. BROOKS,
Superintendent.

REPORT OF THE PUMPING ENGINEER

CAMBRIDGE, December 2, 1901.

To the Honorable, the Water Board of the City of Cambridge.

GENTLEMEN:—I would report that the Leavitt engine No. 7, has pumped all the water used by the City the past year, without any expense for repairs.

Worthington engines Nos. 1 and 2, and Blake engine No. 6, have not been started the past year except to move them by water pressure weekly, for safety.

The fire-room walls have been painted two coats of cold water paint and the boiler covering and all the iron work two coats of lead and oil. This has been done by the employees at the Station at a cost for material only.

The machinery and fixtures at the Station are in first-class condition.

The shower bath which was put in the fire-room the past year has proved a great benefit to the employees in warm weather and been appreciated by them.

You will notice by the pumping record quite a difference in duty between the first six months and the remainder of the year, in favor of coal by cargo over that teamed which runs very unevenly as to quality and dryness.

Respectfully submitted,

(Signed) E. I. HARRIS,
Chief Engineer.

OPERATING EXPENSES AT PUMPING STATION.

Coal	$5,325.75
Carpenter Work	11.86
Express	28.16
Ice	49.80
Lighting	27.09
Oil, grease and packing	523.07
Painting	354.82
Plumbing	33.65
Repairs on boilers	243.34
Telephone	108.66
Tools and hardware	208.36
Miscellaneous	87.35
Salaries	8,048.58
	$15,050.49

ENGINE RECORD, POND LEVELS AND RAINFALL.

Date.	Engine No. 7.			Daily Average Water Pumped.	Total Coal Consumed.	Daily Average Coal Consumed.	Average Height of Pond	Rainfall.
	Running Time.		Total Water Pumped.					
1900.	Hrs.	Min.	Gallons.	Gallons.	Lbs.	Lbs.	Feet.	Inches
December.....	328	30	220,410,520	7,110,017	292,500	9,435	15.	1.74
1901.								
January.....	348	15	239,847,080	7,737,003	308,750	9,960	15.40	1.55
February	336	45	235,592,720	8,414,026	294,400	10,514	15.08	.79
March	318	15	222,808,960	7,187,386	290,700	9,378	15.21	6.89
April.....	299	30	208,326,800	6,944,227	291,050	9,702	16.69	8.80
May	299	30	207,740,720	6,701,314	268,300	8,655	17.33	6.96
June.....	303	45	236,636,840	7,887,895	284,740	9,491	16.67	1.33
July	328	45	255,524,280	8,242,719	322,100	10,390	15.95	4.70
August	325	—	246,125,000	7,939,516	316,750	10,218	15.67	4.17
September.....	305	30	231,464,200	7,715,473	299,450	9,982	15.44	3.74
October.....	324	45	250,991,840	8,096,511	333,750	10,766	14.99	2.86
November.....	294	—	229,687,480	7,656,249	316,850	10,562	14.62	2.67
Total.....	3,812	30	2,785,156,440	—	3,619,340	—	—	46.20
Daily Average.	—	—	7,630,566	—	9,916	—	15.69	—

REPORT OF THE SUPERINTENDENT OF STREETS

To the Honorable, the City Council:—

GENTLEMEN:—In accordance with the requirements of the ordinance relating to streets, (Sec. 4 of Chap. 25) I have the honor to submit my eighth annual report, for the financial year ending November 30, 1901.

The general arrangement of the report is the same as that followed in recent years, the various accounts of the appropriations being given in practically the same order in which they appear on the City Auditor's monthly statements.

BRIDGES.

Appropriation (original)	$2,500 00	
Transferred from "Maintenance" account	900 00	
		$3,400 00
EXPENDED.		
Draw tenders salaries	$1,678 43	
First Street Bridge:—		
Planking and repairs	779 74	
Third Street Bridge:—		
Planking and repairs	413 00	
Sixth Street Bridge:—		
Planking and repairs	316 82	
Huron Avenue Bridge:—		
Planking	201 99	
Sundries	9 48	
		3,399 46
Balance		54

When the usual work of planking the bridges over Broad Canal was begun, it was found that the sheathing on all of them would have to be renewed and that on the First and Third Street Bridges quite extensive repairs were necessary, a number of the heavy hard pine stringers being badly decayed. As these repairs were essential to the safety of public travel over the bridges the sum of $900 was transferred from the appropriation for Maintenance and the bridges put in good repair.

Nothing has been done during the past year toward renewing the lead protection of the iron work on the Walden Street Bridge, which is being corroded by the action of smoke and gases from the engines passing beneath it. In addition to the amount required for ordinary expenses, provision should be made this year for the protection of this bridge.

CLEANING STREETS.

Appropriation		$30,000 00
EXPENDED.		
Labor	$24,338 37	
Teaming	1,378 51	
Hay and grain	1,796 44	
Shed for street cleaning machinery at Raymond St. Yard	875 74	
Sweeping machines repairs	455 59	
Refilling sweeper brooms	530 76	
Rubbish barrels	140 85	
Hardware, tools, etc.	244 53	
Lumber	120 64	
Broom stock, sand and sundries	118 21	
		29,999 64
Balance		36

Of the above amount there was expended for care of snow and ice:—

District 1	$1,639 05
District 2	1,172 71
	$2,811 76

By the reduction of the appropriation for cleaning streets this year to the amount of nearly $5,000 we were to some extent hampered in this branch of the work of the department. The improvement in the construction of our streets, increasing the amount of smooth pavement requiring daily care, materially increases the cost of this work. An exceedingly high standard of cleanliness has been attained during recent years and is now demanded by the public as a matter of course. Notwithstanding the greater amount of work we are now enabled to perform by the employment of improved machinery, this standard cannot be maintained by reducing the appropriation. No argument seems necessary to emphasize the vital importance of keeping our streets in the cleanest possible condition, either as a health or as an economic measure, and an appropriation of $40,000 would be no more than sufficient to properly carry on the work.

The various machines employed in the work of this division have rendered excellent service, and considering the amount of work done by them, are in good condition. The cost for repairs has been comparatively small, and their purchase has proven a wise investment for the City.

The experiment of refilling our sweeper brooms at the shop at the Raymond Street Yard has been a success. The brooms are filled at somewhat less cost than that charged by outside parties, valuable time is saved by having them always filled ready for use, and they wear nearly twice as long.

COLLECTION OF ASHES.

Appropriation	$28,000 00	
Transferred from "Maintenance"	830 00	
		$28,830 00
EXPENDED.		
Labor	$23,134 84	
Teaming	348 50	
Salary of foreman	824 50	
Hay, grain and straw	2,744 34	
Harnesses, repairs, etc.	469 77	
Horses (five)	860 00	
Horse and wagon covers	108 00	
Lumber and hardware for furnace house	143 49	
Hardware, lumber, paints, oils, etc.	134 88	
Bicycle repairs and sundries	61 50	
		28,829 82
Balance		$0 18

The problem of what shall be done with the ashes, rubbish, etc., collected by this division is becoming very pressing and must in a very short time be met and disposed of. Convenient and accessible dumping places are growing more and more difficult to obtain, and new methods must be followed in the disposition of the large amount of this waste now annually collected. It was hoped that this year an appropriation might be made large enough to allow for the establishment of a plant for destroying this waste by the latest improved method, and in the latter part of last year we began the construction of a building for that purpose. This building, fifty feet long, by thirty feet wide, with doors so arranged that the largest wagons can drive in and dump their loads is now completed and ready for the installation of the machinery and furnace for separating the marketable material and consuming the refuse. An estimate of the cost of the necessary machinery, etc. and the probable revenue to be expected will if desired be included in the estimates for the department when the annual budget is under consideration.

Reference to the account of expenditures will show that we were unable to carry on the work of this division within the appropriation originally made, and in addition to the amount shown there are unpaid bills to the amount of nearly $300.00, which must be provided for out of next year's appropriation. Under the present ordinances in relation to the collection of ashes, etc., more is done for householders and more is expected by them than in any other city in New England, with the possible exception of the City of Boston, and while this is very desirable, the fact should not be lost sight of that it entails a large expense and requires a considerable increase in the appropriation for this work.

CONSTRUCTION — BELMONT STREET.

Appropriation		$9,000 00
EXPENDED.		
Labor	$3,812 20	
Teaming	262 86	
Cracked stone and field stone	1,548 39	
Edgestone, flagging and gutter stone	1,014 54	
Gravel, freight and loading	538 10	
Hay and grain	283 26	
Oil, fuel, etc.	177 98	
Sidewalk bricks	118 75	
Sundries	8 78	
		7,764 86
Balance		$1,235 14

By an order approved December 24, 1900, Belmont Street was widened to seventy-five feet, from Holworthy Street to the Belmont line, to conform to the width of the street in that town. Forty-three trees have been removed, edgestones and gutters built on both sides of the street, crossings laid, and the roadway macadamized in a very thorough manner. As the widening of the bridge over the railroad was not begun by the railroad company until late in the season, some work remains to be done at the corner of Holworthy Street, and the unexpended balance above is to be reappropriated for that purpose.

CONSTRUCTION — CLARK STREET.

Appropriation		$1,416 65
EXPENDED.		
Labor	$395 27	
Cracked stone	373 15	
Edgestone	250 21	
Oil	5 13	
		1,023 76
Balance		$392 89

By an order approved January 3, 1901, Clark Street from School Street to Washington Street was accepted and laid out at a width of thirty feet. Four trees were removed, edgestones and gutters laid on both sides, and the roadway macadamized in a substantial manner.

CONSTRUCTION — GRANITE STREET.

Appropriation		$8,250 00
EXPENDED.		
Labor	$2,167 99	
Teaming	514 12	
Edgestones	787 80	
Field stone and cracked stone	1,104 12	
Gravel, freight and loading	295 01	
Hay and grain	45 90	
Sidewalk bricks	100 00	
Sundries	43 75	
		5,058 69
Balance		$3,191 31

By an order approved December 29, 1899, Granite Street was accepted and laid out at a width of forty feet from Magazine Street to Pearl Street, and on September 28, 1900, it was extended at the same width from Pearl Street to Brookline Street. The amount expended, as shown above, was for the construction of the entire street. Edgestones and gutters have been laid on both sides of the street, and the roadway macadamized. A great deal of the filling used was obtained at comparatively little expense, which partly accounts for the large unexpended balance. On account of the character of the foundation, it is expected that it will be necessary to use a portion of this balance when the season opens next year.

CONSTRUCTION —INMAN COURT.

Appropriation		$634 36
EXPENDED.		
Labor	$50 25	
Cracked stone	117 69	
		167 94
Balance		$466 42

The above appropriation was the unexpended balance from an appropriation made in 1900, for the construction of Inman Court, from Inman Street to Jones' Alley. The amount expended was for macadamizing the roadway, edgestones and gutters having been laid the previous year.

MAINTENANCE.

Appropriation		$75,000 00
Less amount transferred to Bridges	$900 00	
Less amount transferred to Collection of Ashes	830 00	
		1,730 00
		$73,270 00

EXPENDED.

Salary of Superintendent	$2,000 00	
Clerical assistance	2,193 17	
District foremen	2,441 50	
Labor	35,160 80	
Injured employees, paid for time lost	277 00	
Teaming	978 05	
Asphalt pavement repairs, Massachusetts Avenue	1,428 38	
Bituminous pavement, Temple Street	297 80	
Car tickets	20 00	
Carriage hire	33 50	
Carriages and wagons, new and repairs	817 38	
Field stone and broken stone	8,496 81	
Fuel	1,767 49	
Lighting	370 18	
Gravel, freight and loading	151 75	
Hardware, lumber, tools, etc.	839 14	
Harnesses, new and repairs, horse clothing, etc.	1,336 36	
Hay, grain and straw	6,100 34	
Horses (twelve)	2,225 00	
Horse shoeing stock	461 31	
Paints, oils, etc.	232 33	
Repairs to stables	935 86	
Stable supplies, tools, etc.	622 30	
Steam rollers, repairs and supplies	2,044 87	
Stone crushers, repairs and supplies	1,150 28	
Street signs	79 10	
Sundries	145 38	
Telephones, office supplies, etc.	663 09	
		73,269 17

83

Although the total appropriations for the department this year exceeded in the aggregate those of last year by nearly $12,000, the appropriation for "Maintenance," to which all the general and running expenses of the department are charged, was about $7,000 less, and as the expense of operating and maintaining the department remains about the same, the amount which can be shown to have been expended directly on the streets is consequently smaller.

The amount available for actual street work may be seen by the following schedule, showing the streets macadamized, resurfaced, and repaired in each district, an itemized account of each street, and the total cost in each district :—

RESURFACING

DISTRICT No. 1.

Albany Street, between Portland Street and Massachusetts Avenue :—		
Labor	$140 00	
Teaming	207 00	
Amount carried forward	$347 00	

Amount brought forward	$347 00	
Steam roller	68 25	
Cracked stone	722 50	
Gravel	8 00	
		$1,145 75
Amherst Street, between Massachusetts Avenue and Greenhalge Street:—		
Labor	$162 00	
Teaming	219 00	
Steam roller	7 00	
Gravel	50 50	
		438 50
Burleigh Street, between Main Street and Broadway:—		
Labor	$6 25	
Teaming	4 50	
Steam roller	5 25	
Cracked stone	35 00	
Gravel	2 00	
		53 00
Centre Street:—		
Labor	$128 00	
Teaming	174 37	
Steam roller	80 50	
Cracked stone	510 00	
		892 87
Elm Street, between Hampshire and Lincoln Streets:—		
Labor	$212 00	
Teaming	103 50	
Steam roller	38 50	
Cracked stone	202 50	
		556 50
Fourth Street, between Bridge and Gore Streets:—		
Labor	$84 00	
Teaming	88 50	
Steam roller	28 00	
Cracked stone	243 75	
		444 25
Green Street, between Pearl and Brookline Streets:—		
Labor	$58 00	
Teaming	81 00	
Steam roller	38 50	
Cracked stone	270 00	
		447 50
Norfolk Street, between Cambridge and Hampshire Streets:—		
Labor	$143 00	
Teaming	86 87	
Steam roller	49 00	
Cracked stone	337 50	
		616 37
Amount carried forward		$4,594 74

Amount brought forward		$4,594 74
Osborn Street:—		
Labor	$86 00	
Teaming	56 25	
Steam roller	14 00	
Cracked stone	70 00	
Gravel	5 00	
		231 25
Portland Street, between Main and Albany Streets:—		
Labor	$343 00	
Teaming	216 00	
Steam roller	35 00	
Cracked stone	520 00	
Gravel	37 00	
		1,151 00
Sidney Street, between Pilgrim Street and Massachusetts Avenue:—		
Labor	$162 00	
Teaming	198 00	
Steam roller	56 00	
Cracked stone	716 00	
		1,132 00
Sixth Street, between Main Street and the Canal bridge:—		
Labor	$99 00	
Teaming	93 50	
Steam roller	66 50	
Cracked stone	438 75	
		697 75
Spring Street, between First and Second Streets:—		
Labor	$111 50	
Teaming	84 00	
Gravel	30 75	
		226 25
State Street:—		
Labor	208 00	
Teaming	227 25	
Steam roller	82 25	
Cracked stone	572 50	
Gravel	19 00	
		1,109 00
Temple Street, between Massachusetts Avenue and Austin Street:—		
Labor	$111 00	
Teaming	119 25	
Steam roller	47 25	
Cracked stone	150 75	
Bituminous macadam surface	297 80	
		726 05
Amount carried forward		$9,868 04

Amount brought forward		$9,868 04	
West Street, between Inman and Lee Streets:—			
Labor	$150 12		
Teaming	75 00		
Steam roller	24 50		
Cracked stone	256 25		
		505 87	
Total amount District No. 1			$10,373 91

DISTRICT No. 2.

Cambridge Street, between Massachusetts Avenue and Peabody Street:—			
Labor	$29 50		
Teaming	67 50		
Cracked stone	195 50		
Gravel	2 50		
		295 00	
Cedar Street:—			
Labor	$258 00		
Teaming	384 62		
Steam roller	143 50		
Cracked stone	923 75		
Gravel	9 00		
		1,718 87	
Cushing Street, between Belmont Street and Huron Avenue:—			
Labor	$44 00		
Teaming	210 00		
Steam roller	28 00		
Gravel	100 75		
		382 75	
De Wolfe Street:—			
Labor	$20 00		
		20 00	
(Material carted from Massachusetts Avenue.)			
Eustis Street, between Oxford Street and Somerville Line:—			
Labor	$141 00		
Teaming	159 75		
Steam roller	42 00		
Cracked stone	192 50		
Gravel	8 75		
		544 00	
Fresh Pond Drive, between Huron Avenue and the Bridge:—			
Labor	$52 00		
Teaming	39 38		
Steam roller	52 50		
Cracked stone	212 50		
Gravel	1 75		
		358 13	
Amounts carried forward		$3,318 75	$10,373 91

Amounts brought forward		$3,318 75	$10,373 91
Garden Street, between Arsenal Square and Waterhouse Street:—			
Labor	$26 50		
Teaming	59 62		
Steam roller	49 00		
Cracked stone	142 50		
		277 62	
Garden Street, between Chauncy and Follen Streets:—			
Labor	$19 50		
Teaming	45 00		
Steam roller	15 75		
Cracked stone	105 00		
		185 25	
Garden Street, between Linnaean Street and Huron Avenue:—			
Labor	$148 00		
Teaming	175 87		
Steam roller	94 50		
Cracked stone	552 50		
Gravel	6 75		
		977 62	
Harris Street:—			
Labor	$34 50		
Teaming	73 12		
Steam roller	50 75		
Cracked stone	192 50		
Gravel	9 00		
		359 87	
Holworthy Street:—			
Teaming	$30 00		
Steam roller	7 00		
Gravel	14 75		
		51 75	
Massachusetts Avenue, between Quincy Square and Dunster Street:—			
Repairs to asphalt pavement under contract with Barber Asphalt Paving Company		1,428 38	
Park Avenue, between Holworthy Street and Huron Avenue:—			
Labor	$76 00		
Teaming	161 25		
Steam roller	14 00		
Gravel	63 50		
		314 75	
Amounts carried forward		$6,913 99	$10,373 91

Amounts brought forward		$6,913 99	$10,373 91
Porter Road:—			
Labor	$65 50		
Teaming	134 25		
Steam roller	63 00		
Cracked stone	225 00		
Gravel	28 50		
		516 25	
Quincy Square:—			
Labor	$56 00		
Teaming	97 50		
Steam roller	31 50		
Cracked stone	242 50		
		427 50	
Rice Street:—			
Labor	$104 00		
Teaming	113 25		
Steam roller	56 00		
Cracked stone	180 00		
		453 25	
Riverview Avenue:—			
Labor	$37 50		
Teaming	4 50		
Steam roller	15 75		
		57 75	
(Material carted from Massachusetts Avenue.)			
Roseland Street:—			
Labor	$28 00		
Teaming	64 87		
Steam roller	36 75		
Cracked stone	195 00		
		324 62	
Sargent Street, between Rindge Avenue and Railroad Street:—			
Labor	$110 00		
Teaming	255 63		
Steam roller	3 50		
Gravel	38 00		
		407 13	
Sherman Street, between Rindge Avenue and Walden Street:—			
Labor	$20 00		
Teaming	5 25		
		25 25	
Traymore Street:—			
Labor	$37 50		
Teaming	92 25		
Steam roller	10 50		
Cracked stone	47 50		
Gravel	5 75		
		193 50	
Amounts carried forward		$9,319 24	$10,373 91

Bituminous Macadam, Temple Street. Spreading and Rolling two-inch surface

Amounts brought forward		$9,319 24	$10,373 91
Vineyard Street:—			
Labor	$8 00		
Teaming	15 75		
Steam roller	7 00		
Gravel	5 00		
		35 75	
Washington Avenue:—			
Labor	$69 00		
Teaming	121 13		
Steam roller	112 00		
Cracked stone	352 50		
Gravel	1 50		
		656 13	
Total amount District No. 2 . . .			$10,011 12
Total, Districts Nos. 1 and 2			$20,385 03
Amount expended for patching, District No. 1		$4,865 51	
Amount expended for patching, District No. 2		5,124 50	
			9,990 07
			$30,375 10

There are throughout the City, a large number of residential streets, where the traffic is comparatively light, and where a smooth and, so far as possible, noiseless pavement is desirable. A recent improvement in street construction, known as waterproof bituminous macadam has been brought to our attention, and as an experiment, Temple Street, in Ward Two, has been paved with it. The illustrations in this report give an idea of its construction and appearance, and a description of the method may not be uninteresting.

The foundation consists of four inches of crushed stone laid and rolled in the same manner as ordinary macadam. Over this is spread two layers of bituminous cement, for the purpose of firmly holding the foundation and uniting it to the wearing surface. The wearing surface, which is two inches thick, contains all the ingredients of a stone macadam surface, *i. e.*, stone varying in size from about two inches to a fine powder. The particles of stone are carefully proportioned as to size to give the greatest possible density and least voids and are heated and mixed by machinery with the bituminous cement. The mixture is then hauled to the street and while still hot spread on the foundation so as to give a uniform thickness and grade, and rolled with a heavy steam road roller. The roller used here weighs sixteen tons.

The pavement when completed presents a surface similar to, and affording the foothold of, macadam, but the particles of stone are held

firmly together by bituminous cement similar to the ordinary asphalt pavement, which is made of sand and bitumen.

Asphalt is a bituminous mortar pavement (bitumen and sand). Bituminous macadam is a bituminous concrete (bitumen, sand and hard stone). It therefore combines the advantages of asphalt and macadam, and overcomes most of the objections to each, such as: first, slipperiness and liability of the asphalt to crack and disintegrate; second, the mud, dust, rapid wear, washing out and unsanitary features of the macadam.

In addition, it gives a more solid and dense and, therefore, more waterproof and durable wearing surface than either asphalt or macadam.

By some of the best road builders in the country this new pavement is regarded as the best, considering its cost, that has yet been devised, and if its durability can be demonstrated, it may be used to great advantage on streets such as have been indicated, as it can be laid at a slightly increased cost per square yard over macadam and at less than one half the cost of asphalt.

Bituminous Macadam, Temple Street. Appearance of finished Street

STREETS LAID OUT AND ACCEPTED, DECEMBER 1, 1900, TO DECEMBER 1, 1901.

Location of Street.						Plan.	
Name.	From	To	Length in Feet.	Width in Feet.	Date of Acceptance.	Made By	Date.
Ash Street	Mt. Auburn Street	Southerly	310	30	Dec. 28, 1900	J. G. Chase	Oct. 13, 1886
*Belmont Street	Holworthy Street	Belmont Town Line	1,130	75	Dec. 24, 1900	City Engineer	June 1898
Charles Street	First Street	Second Street	400	50	Dec. 28, 1900	City Engineer	Nov. 19, 1900
Clark Street	School Street	Washington Street	280	30	Jan. 3, 1901	City Engineer	Oct. 15, 1900
Dudley Street	Cedar Street	Montgomery Street	590	40	Dec. 28 1900	City Engineer	Nov. 22, 1900
Gorham Street	Wendell Street	Hammond Street	335	40	July 3, 1901	W. A. Mason & Son	Mar. 15, 1901
Harris Street	Oxford Street	Somerville City Line	350	40	Dec. 28, 1900	W. A. Mason & Son	July 30, 1900
Holden Street	Scott Street	Farrar Street	412	40	Nov. 29, 1900	W. A. Mason & Son	Mar. 5 1901
Magoun Street	Massachusetts Avenue	Whittemore Street	677	40	July 3, 1901	D. E Perkins	Sept. 7, 1900
Marcella Street	Berkshire Street	Portland Street	300	40	July 3, 1901	E. F. Bowker	June 16, 1900
Sargent Street	Rindge Avenue	Railroad Street	841	30	Dec. 28, 1900	City Engineer	Dec. 1900
Spring Street	First Street	Second Street	400	50	Dec. 28, 1900	City Engineer	Nov. 5, 1900
Vine Street	First Street	Second Street	400	50	Dec. 28, 1900	City Engineer	Nov. 19, 1900

* Widening.

Total length of accepted streets, December 1, 1900, 92,845 miles.

Total length of streets accepted from December 1, 1900, to December 1, 1901, 5,295 feet or 1.003 miles.

Total length of accepted streets, December 1, 1901, 93.848 miles.

PAVING, EDGESTONES AND SIDEWALKS.

Appropriation		$25,000 00
EXPENDED.		
Labor	$8,841 56	
Teaming	1,393 82	
Artificial stone sidewalks	1,015 83	
Bricks	4,076 88	
Edgestones	7,490 70	
Gravel, freight and loading	934 10	
Gutter stone	623 20	
Hardware, tools, etc.	215 14	
Hay and grain	157 08	
Lanterns, oil, lumber and sundries	251 59	
		24,999 90
Balance		10

To this appropriation is charged the expense of all new edgestones, and brick or artificial stone sidewalks.

The following tables show by districts the new sidewalk work done during the year, viz., the number of feet of new circles and edgestones set, and square yards of new brick sidewalk laid, with the expense on each street :—

PAVING DISTRICT No. 1.

STREETS.	Linear Feet Straight Curb.	Linear Feet Circle Curb.	Square Yards Brick Sidewalk.	Amount.
Albany Street, between Massachusetts Avenue and Railroad Crossing	882 9	180	.....	$1,325.69
Amory Street, between No. 133 and Hampshire Street	.....	.....	207	149.01
Antrim Street, Nos. 79, 81	40	.....	27	84.31
Berkshire Street, No. 94	.....	.....	32	23.35
Berkshire Street, Nos. 96, 98	.....	.....	18.6	19.81
Cottage Street, No. 20	.....	.....	28	36.76
Elm Street, between Cambridge street and Hampshire Street	407.2	.....	718.5	1,085.12
Granite Street, between Pearl Street and Magazine Street	.....	.....	140	119.26
Green Street, No. 40	46	.....	99	158.45
Hastings Square	574	.....	.....	386.78
Kinnaird Street, between Putnam Avenue and 135 feet east	136	.....	.....	228.51
Pearl Street, No. 224	.....	.....	34	30.93
Portland Street, between Main Street and Albany Street	462.3	258.7	.....	1,000 18
Portland Street, at southwest corner of Marcella Street	.....	.....	62.3	70 53
Springfield Street, between Cambridge Street and Somerville line	228	.....	171	466.69
Windsor Street, No. 146	.....	.....	27.1	22.26
Windsor Street, No. 150	.....	.....	36	55.54
Windsor Street, Nos. 430, 440	.....	.....	103	113.50
Total	2,776.4	438.7	1,703.4	$5,376.68

PAVING DISTRICT No. 2.

STREETS.	Linear Feet Straight Curb.	Linear Feet Circle Curb.	Square Yards Brick Sidewalk.	Amount.
Appian Way, between Garden Street and Brattle Street	792.2		443.6	$1,295.38
Bowdoin Street, corner Martin Street	65.5		52	140.30
Cleveland Street, between Dana Street and Ellery Street	288.5		154	556.09
Cushing Street, between Belmont Street and Huron Avenue	3,166	264		1,509.25
Eustis Street, between Oxford Street and Somerville line	1,232	45		1,345 85
Fairfield Street, at junction of Pemberton Street	25		17	46.31
Follen Street, between Waterhouse Street and the Angle	238.2	66.5	153	427.47
Follen Street, Nos. 9 to 29	300		248	589.83
Garden Street, between Waterhouse Street and Concord Avenue	227.6	36.2		353.11
Harris Street, between Oxford Street and Somerville line	616.5	15.9		722.88
Holyoke Street, between Mt. Auburn Street and Winthrop Street			90	83 98
Holworthy Street, No. 85			44	32.00
Holworthy Street, between Belmont Street and Locust Street	2,094.4	211.4		2,331.64
Mason Street, from No. 85 Brattle Street			134	104.75
Massachusetts Avenue, at south side Porter's Bridge			77	60.83
Milton Street, from No. 10 to Massachusetts Avenue			79.4	73.88
Mt. Vernon Street, between Upland Road and 80 feet south	80			108 85
Park Avenue, between Holworthy Street and Angle			488	442.13
Plympton Street, near Mt. Auburn Street			43.2	37.42
Prescott Street, between Harvard Street and Broadway	540.5		425.3	1,156.43
Prescott Street, beween Harvard Street and 330 feet north	292		232.1	723.08
Regent Street, between Massachusetts Avenue and 215 feet southeast	215		148	400.05
Rice Street, between Sheridan Square and Massachusetts Avenue	500	30	1,183	3,109.62
Richdale Avenue, between Upland Road and Norton's Stable	50	89.3	106	318 45
Traymore Street, between Harris Street and Eustis Street	510			611.33
Upland Road, between Mt. Vernon Street and Walnut Avenue	139.7	12.6		290.59
Walden Street, Nos. 36 to 46	121	9.8		221.77
Wendell Street, No. 73			36	35.60
Total	11,494.1	780.7	4,153.6	$17,128.87

It will be noted that the total cost of new brick sidewalks and edgestones laid is considerably less than the amount appropriated. Reference to the summary of expenditures will show that $1,015.83 was paid for allowance on artificial stone sidewalks laid by abuttors, and an inspection of the account of stock on hand, on the last page of this report, shows that we have $2,000.00 worth of sidewalk bricks on hand, which will enable us to begin the work of laying new sidewalks just as soon as the ground opens in the spring.

The appropriation for this division was not nearly sufficient to complete the orders passed by the Board of Aldermen for new brick sidewalks and edgestones. We have on hand seventeen uncompleted orders and there are twenty-one petitions in the files of the Committee on Highways not yet acted upon. The estimated cost of the work required under these orders and petitions is about $20,000.00 and a largely increased appropriation will be necessary to meet the demands for new sidewalks next year.

Following is a list of streets where artificial stone sidewalks were laid during the past year. The list includes the sidewalks laid around the new county building in Ward Three, for which no allowance was made:

ARTIFICIAL STONE SIDEWALKS.

Street.	Square Yards.
Berkshire Street, No. 122, corner Marcella Street	39.
Brattle Street, No. 126, corner Brown Street	56.
Cambridge Street, south side, from Second to Third Street	349.
Otis Street, north side, from Second to Third Street	275.2
Second Street, west side, from Cambridge to Otis Street	176.1
Third Street, east side, from Cambridge to Otis Street	173.1
Chestnut Street, corner Hastings Square	71.9
Hastings Square, corner Chestnut Street	39.3
Dunster Street, corner Winthrop Street	86.2
Magazine Street, west side, corner William Street	64.3
William Street, south side, corner Magazine Street	92.8
Mt. Vernon Street, corner Upland Road	46.7
Upland Road, south side, corner Mt. Vernon Street	76.1
Porter Road, inside the Square	270.2
Porter Road, south side, from Massachusetts Avenue	143.83
Third Street, in front of George F. Blake Manufacturing Company	166.7
Marcella Street, from No. 4 to 32	230.
	2,356.43

The last item includes 298.7 linear feet of artificial stone curbing.

THE STREET RAILWAY TAX.

Under the provisions of the legislative act (Chap. 578 of Acts of 1898), regulating the distribution of the annual franchise tax of street railway corporations, the City has, during the past three years, received

nearly $211,000, the account at the close of this financial year being as follows: —

Amount received 1898		$50,965 53
" " 1899		47,569 33
" " 1900		19,933 29
" " " from Boston Elevated Railway Company for work done out of this tax		5,740 20
Amount received 1901		86,582 65
		$210,791.00

EXPENDED, 1899.

Paving, edgestones and sidewalks	$2,500 00		
Rebuilding Harvard Square	3,364 39		
" Portland Street	8,536 47		
" Prospect Street	24,792 43		
Vitrified blocks	677 54		
		$39,870 83	

EXPENDED, 1900.

Paving, crossings and repairs	$9,999 72		
Rebuilding Cambridge Street	17,998 27		
" Portland Street	22,486 80		
" Pearl Street and Harvard Square	31,325 19		
		81,809 98	

EXPENDED, 1901.

Paving, crossings and repairs	$9,999 48		
Rebuilding Bridge Street	17,996 54		
" Broadway	9,981 08		
" Brookline Street	4,994 47		
" Harvard Square	7,744 00		
" Massachusetts Avenue from R. R. Crossing to Harvard Bridge	25,987 99		
Rebuilding Mount Auburn Street	9,996 12		
		86,699 68	
			208,380 49
Unexpended balance			$2,410 51

Detailed accounts of the expenditures this year under the appropriations from this tax will be found under their various headings in this report.

The sum of $83,590.57 will be received from this tax next year, which with the unexpended balance from this year's accounts, shown above, make a total of $86,001.08 available for street work.

If the policy so far pursued in expending the greater part of the amount thus received in permanent construction on streets such as may be termed thoroughfares, is still to be followed, I respectfully call attention to several such streets, on most of which there are street railway tracks and all need extensive repairs or rebuilding.

Brookline Street, from Auburn Street to Henry Street; this street is paved with vitrified blocks from Massachusetts Avenue to Auburn Street. The remainder of the street is macadam, in very poor condition and very difficult to keep in repair.

Cambridge Street, from Bridge Street to Third Street; the granite pavement on this section of the street is in bad condition and should either be relaid or replaced with large blocks. Cambridge Street, from Prospect Street to Kirkland Street, Massachusetts Avenue, from the Boston and Albany crossing to Lafayette Square, River Street entire, Massachusetts Avenue from Central Square to Quincy Square, Concord Avenue from Arsenal Square to Huron Avenue, Broadway from Davis Street to Windsor Street; these are all macadam streets on which double tracks are laid, exceedingly expensive and difficult to keep in repair as at present constructed. Among other streets on which there are no street railway tracks, but where the heavy travel makes ordinary macadam expensive, may be mentioned: Sherman Street, from Rindge Avenue to the railroad, Franklin Street, from Brookline Street to Sidney Street, and Sidney Street, from Franklin Street to Massachusetts Avenue.

All the above named streets have been measured and estimates of the cost of the various kinds of pavements will be presented to the next City Government.

REBUILDING STREETS

BRIDGE STREET.

Appropriation (from Street Railway Tax)	$20,000 00	
Unexpended balances of Street Railway Tax accounts transferred to this appropriation	40 86	
		$20,040 86
EXPENDED.		
Labor	$5,752 20	
Teaming	684 98	
Edgestone and flagging	411 26	
Granite paving blocks	9,824 04	
Gravel, freight and loading	759 00	
Hardware, tools, etc	105 21	
Hay and grain	270 41	
Oil and cement	70 69	
Sidewalk bricks	118 75	
		17,996 54
Balance		$2,044 32

The above summary shows the cost of the various items which entered into the expense of paving Bridge Street from the transfer station to the Somerville line.

All the old paving was removed and the entire roadway, including the spaces between the street railway tracks, was paved with large "Boston" blocks of the very best quality.

Edgestones were reset and brick sidewalks relaid wherever necessary and this street is now in first class condition.

BROADWAY.

Appropriation (from Street Railway Tax)		$10,000 00
EXPENDED.		
Labor	$3,140 28	
Teaming	70 06	
Edgestones and flagging	861 28	
Granite paving blocks	5,178 44	
Gravel, freight, loading and carting	603 60	
Hay and grain	109 92	
Oil	17 50	
Transferred to Bridge Street appropriation	18 92	
		10,000 00

The above account shows the amount expended for paving with first class Boston blocks, on the south side of Broadway, from Burleigh Street to Davis Street, and on the north side, from Burleigh Street to Clark Street.

Edgestones were set on both sides of the street, and new crossings laid wherever necessary.

BROOKLINE STREET.

Appropriation (from Street Railway Tax)			$5,000 00
EXPENDED.			
Labor		$2,021 35	
Blocks (Vitrified)		1,942 20	
Cement, American	$370 12		
" Portland	143 65		
		513 77	
Concrete, gravel stone		229 37	
Edgestones		73 82	
Hay and grain		91 80	
Hardware, lumber and tools		50 40	
Road pitch, oil and sand		71 76	
Transferred to Bridge Street appropriation		5 53	
			5,000 00

The above account shows the cost of laying vitrified block pavement on Brookline Street, from Massachusetts Avenue to Auburn Street.

This small section is paved for the most part with Catskill blocks, similar to those laid on Prospect Street two years ago. A beginning was made on this street this year, with the idea of next year completing the street as far as the street railway tracks are laid.

PAVING — CROSSINGS AND REPAIRS.

Appropriation (from Street Railway Tax)		$10,000 00

EXPENDED.

Labor	$7,054 58	
Teaming	98 98	
Artificial stone sidewalk repairs,	205 17	
Blocks (vitrified)	587 00	
Bricks	675 00	
Cement	132 45	
Granite flagging	161 53	
Granite paving blocks recut	609 93	
Gravel, freight and loading	270 00	
Hay and grain	170 28	
Lumber, oils, tools, etc.	34 56	
Transferred to Bridge Street appropriation	52	
		10,000 00

The above summary shows the expense of laying and repairing cross ings, and repairs to sidewalks, edgestones and gutters. For several years past, the appropriation for this work has been the same, although the sidewalks to be kept in repair increase at the rate of three or four miles per year, and twice the usual amount might be expended for this work. The vitrified brick crossings laid last year show no appreciable wear and as will be seen by reference to the following list of crossings laid and repaired, twenty-five were laid with that material this year :—

CROSSINGS.

District No. 1.

Antrim Street, at Broadway (Vitrified Brick)	$64 93
Cambridge Street, at Ninth Street	12 71
Centre Street, between Dana Street and Hancock Street	35 30
Dana Street, at Massachusetts Avenue (Vitrified Brick)	58 71
Douglass Street, at Massachusetts Avenue	63 78
Ellsworth Avenue, at Broadway (Vitrified Brick)	54 52
Ellsworth Park, at Ellsworth Avenue (Vitrified Brick)	38 57
Fayette Street, at Broadway (Vitrified Brick)	70 64
Broadway, at west side Maple Avenue	58 40
Green Street, at east side Hancock Street (Vitrified Brick)	54 63
Hancock Park at Hancock Street (Vitrified Brick)	49 27
Highland Avenue, at Broadway (Vitrified Brick)	84 83
Inman Square	21 01
Inman Street, corner Summer Street (Repairs)	9 19

District No. 1.—Continued.

Maple Avenue, at Broadway (Vitrified Brick)	$74 77
Massachusetts Avenue, between Prospect Street and Columbia Street	152 62
Norfolk Street, corner Cambridge Street (Repairs)	15 38
Portland Street, at junction of Albany Street	37 91
Prospect Street, at south side Haughton Street	62 95
Sidney Street, corner Franklin Street	37 34
Sixth Street, corner Broadway (Repairs)	12 15
Western Avenue, corner Green Street	21 43
Western Avenue, at junction of Franklin Street (Repairs)	18 80
Western Avenue, between Franklin Street and Jay Street	28 55
Western Avenue, corner Pleasant Street (Repairs)	7 01
Total District No. 1	$1,145 40

District No. 2.

Avon Street, at Shepard Street (Vitrified Brick)	$60 57
Brattle Street, at Lake View Avenue (Repairs)	9 73
Brattle Street, at Lexington Avenue (Vitrified Brick)	105 41
Cambridge Street, at Ellery Street	52 50
Cambridge Street, at Massachusetts Avenue (Repairs)	4 13
Cedar Street, at Norris Street (Repairs)	5 38
Concord Avenue, opposite Chauncy Street (Repairs)	8 63
Concord Avenue, corner Craigie Street (Repairs)	7 64
Cushing Avenue, at Cushing Street (Vitrified Brick)	82 17
Dana Street, at Broadway (Vitrified Brick)	68 39
DeWolfe Street, at Mt. Auburn Street (Vitrified Brick	47 89
Ellery Street, at Massachusetts Avenue (Vitrified Brick)	58 24
Follen Street, Nos 25 to 29 (Vitrified Brick)	53 46
Garden Street, at Arsenal Square (Repairs)	6 13
Garden Street, at Waterhouse Street (Vitrified Brick)	89 55
Holyoke Street, at Winthrop Street (Vitrified Brick)	21 26
Huron Avenue, corner Concord Avenue (Repairs)	6 13
Langdon Street (Vitrified Brick)	30 60
Mt. Auburn Street, at Banks Street (Repairs)	5 38
Mt. Auburn Street, at Elmwood Avenue (Vitrified Brick)	174 48
Oxford Street, at Sacramento Street (2, Vitrified Brick)	208 04
Park Avenue (Vitrified Brick)	52 72
Regent Street, at Massachusetts Avenue (Vitrified Brick)	89 62
Rutland Street, at Shepard Street (Vitrified Brick)	90 74
Somerville Avenue, between White Street and Somerville line	52 85
Spruce Avenue, at Holworthy Street	26 00
Trowbridge Street, at Cambridge Street (Vitrified Brick)	58 58
Winthrop Street, at Holyoke Street (Vitrified Brick)	26 05
Total District No. 2	$1,502 27

HARVARD SQUARE.

Appropriation (from Street Railway Tax)			$8,110 19
EXPENDED.			
Labor		$3,113 33	
Teaming		423 00	
Blocks (Vitrified)		2,875 35	
Cement American	$637 65		
" Portland	70 98		
		708 63	
Concrete gravel stone		417 28	
Edgestone		33 29	
Gravel, freight and loading		118 02	
Lumber, road pitch, etc.		55 10	
			7,744 00
Balance			$366 19

With the exception of a small triangular space near the enclosure containing the flag staff, Harvard Square is now entirely paved with vitrified blocks and presents a fine appearance.

In the latter part of the season a sufficient number of blocks was ordered to complete the work and the unexpended balance shown above will be sufficient for the labor, concrete materials, etc., required for that purpose.

MASSACHUSETTS AVENUE FROM HARVARD BRIDGE TO B. & A. R. R. CROSSING.

Appropriation (from Street Railway Tax)			$26,000 00
EXPENDED.			
Labor		$9,400 33	
Teaming		716 40	
Blocks (Vitrified)		10,653 75	
Cement, American Rosendale	$1,733 06		
" Portland	625 30		
		2,358 36	
Concrete gravel stone		1,288 58	
Edgestone and flagging		327 14	
Gravel, freight and loading		523 40	
Hardware, tools, etc.		124 33	
Hay and grain		233 31	
Lumber, oil, etc.		204 56	
Road pitch		157 83	
Transferred to Bridge Street appropriation		12 01	
			26,000 00

The above account shows the cost of laying vitrified blocks on that part of Massachusetts Avenue between Harvard Bridge and the crossing at the Grand Junction railroad.

The best vitrified blocks known were purchased for this street and were laid with the greatest care in the manner followed by the best engineers throughout the country.

This is by far the most heavily travelled street in this City on which vitrified blocks have been laid, and their wearing qualities will be put to a most severe test.

MOUNT AUBURN STREET.

Appropriation (from Street Railway Tax)		$10,000 00
EXPENDED.		
Labor	$3,687 72	
Teaming	305 00	
Carting cracked stone	779 49	
Cracked stone	4,223 98	
Gravel, freight and loading	59 50	
Gutter stone and flagging	309 66	
Hay and grain	213 78	
Lumber, oil, cement and fuel	173 24	
Sidewalk bricks	81 25	
Vitrified blocks	162 50	
Transferred to Bridge Street appropriation	3 88	
		10,000 00

The above amount was expended for macadamizing Mount Auburn Street from Putnam Square to Brattle Square.

Edgestones were reset on both sides of the street, the old cobble stone gutters taken out and granite block gutters laid. Where there were flagging crossings they were relaid and the old stone crossings were replaced by vitrified brick.

The roadway was macadamized to a depth of eight inches with the hardest trap rock which has ever come under our observation and ought to remain in good condition for a number of years.

WATERING STREETS.

Appropriation			$26,000 00
Transferred from Contingent Fund			683 84
			$26,683 84
EXPENDED.			
Salary of foreman		$950 25	
Sprinkling contracts		21,858 10	
Cost of levying assessments		174 75	
Stand pipe repairs		196 27	
Bicycle repairs and sundries		50 30	
Watering cart repairs.			
Labor	$1,474 76		
Hardware, iron, etc.	158 90		
Lumber and mill work	330 89		
Paints, oils, varnish, etc.	409 59		
Springs	217 98		
Tanks, attachments and hose	862 05		
		3,454 17	
			$26,683 84

The above account shows the cost of watering all the accepted streets of the City in accordance with the provisions of the legislative act authorizing cities to water streets and to assess abuttors for the expense thereof, and of watering eighteen private ways which were paid for in full by the abuttors.

The work was done under the system followed for the last few years, a uniform price of $75 per month was fixed, and responsible and trustworthy persons were selected to the number of forty-five, to each of whom was assigned one cart. The City was laid out in a corresponding number of districts, each averaging a little over two miles of streets, and each contractor was required to keep the streets in his district properly watered at all times, Sundays included.

With the existing high prices for grain, horses, etc., there is every reason to believe that contractors will not be willing to undertake this work next year at the price per month above stated, and an increased appropriation for this division will therefore be required.

The cordial relations which have existed during the past year between His Honor, the Mayor, and the department, and his helpful advice and expressions of approval have materially lightened our labor. The assistance and counsel of the joint and standing Committees on Highways have been of great value and are gratefully appreciated. My acknowledgements are extended to the members of the City Council, and to the officials of the City for their courtesy and consideration. The value of the work performed by the employees in general throughout the department is recognized and most heartily commended.

Following is a schedule of property in charge of this department: —

REAL ESTATE.

City Yard and Stable, Raymond Street: —		
Land	$11,000 00	
Stable, sheds, scales, etc.	34,500 00	
		$45,500 00
City Stable, Hampshire Street: —		
72,661 square feet of land, Assessors' valuation	$30,000 00	
Stable, sheds and scales	17,000 00	
		47,000 00
Yard and Pound, east side of Norfolk Street: —		
39,600 square feet of land, Assessors' valuation		12,000 00
Yard and Wharf at River Street: —		
72,700 square feet of land, Assessors' valuation		29,000 00
Amount carried forward		$133,500 00

Amount brought forward		$133,500 00

PERSONAL PROPERTY.

78 horses	$11,700 00	
49 watering carts	12,000 00	
47 carts (29 single, 18 double)	4,700 00	
80 sets of harness (8 chain)	2,100 00	
23 sleds, 2 snow-plows, 1 sleigh	1,350 00	
2 snow levelers, 16 gutter plows	340 00	
2 buggies, 3 foreman's wagons	300 00	
3 tool wagons, 2 bicycles	175 00	
2 hayracks, 2 caravans, 2 pungs	275 00	
2 paper carts	200 00	
8 large (Shadbolt) ash carts	2,500 00	
2 Watson carts	350 00	
4 steam rollers	6,000 00	
1 two horse section roller	150 00	
4 road machines, 2 road scrapers	1,200 00	
7 side street sweepers, 1 gutter sweeper	1,500 00	
4 pick-up sweepers	2,000 00	
Stone crushing plant, Raymond Street yard	5,000 00	
Stone crushing plant, Hampshire Street yard	5,000 00	
Tools, stable furniture, etc.	4,000 00	
Lumber, iron, cement, paints, oils, etc.	1,500 00	
40 feet straight edgestone, 120 feet circles	87 20	
300,000 granite paving blocks (seconds)	3,000 00	
21,700 vitrified blocks	526 00	
160,000 sidewalk bricks	2,000 00	
1,200 tons, field stone and cracked stone	1,050 00	
		69,003 20
Total		$202,503 20

Respectfully submitted,

CHARLES A. BROWN,
Superintendent of Streets.

REPORT OF THE ELECTRICAL DEPARTMENT

OFFICE OF THE CITY ELECTRICIAN.
December 2, 1901.

To the Honorable, the City Council: —

In compliance with the City Ordinance, I respectfully submit the third annual report of the Electrical Department.

The scope of the duties of this department is seen by the following division of the work appertaining to it: —

1. Inspection of electric wires in buildings.
2. Supervision of electric wires and poles in the streets.
3. Electrical construction work.
4. Consulting electrical engineering for the municipal departments.
5. General electrical expert work for the City.
6. Maintenance and operation of the Fire Alarm System.
7. Maintenance and operation of the Police Signal System.
8. Supervision of the street lighting of this City.

INSPECTION OF WIRES IN BUILDINGS.

The ordinance requires that all buildings in this City that are wired for electric light, heat or power shall be inspected to see that the installation of the wires and apparatus has been done in a safe and proper manner.

The beneficial results of this inspection carried on for the past ten years is shown by the almost entire lack of fire losses from this cause. No fire in any building has been caused by the electric wires during the past year.

This department has adopted and enforced the National Electrical Code of rules and requirements for the wiring of buildings. These rules are the standard rules for such work throughout the entire country. They are adopted by the engineering and architectural societies, the national electrical association and the insurance companies. They are, moreover, annually revised and any construction permitted that has been found defective in practice is prohibited while new and improved methods are recommended and in many cases insisted upon.

The following tabulation shows the increase of this branch of departmental work : —

Year.	No. of Inspections.	No. of Visits.	Capacity of 16 C. P. Lamps.	H. P. Capacity of Motors.
1896	133	206		
1897	162			
1898	112		5,578	79
1899	213	351	5,798	152
1900	252	481	7,936	164
1901	262	521	9,770	439

The inspections, as will be seen, have doubled since 1896, and moreover, the same has been done without any additional help, either clerical or otherwise. The large number of visits, averaging two to each inspection, is due to several causes, namely ; the necessity of inspections during process of wiring to accommodate plasterers or the relaying of floors in houses that are occupied, and the necessity of visiting work where defects are found. Additional work is frequently and unnecessarily caused by the fact that inspections are asked for before the work is ready for final inspection. The necessity of an inspection of fixture work after the rough and concealed wiring has been done calls for another visit, while in some instances the contractors desire the inspector to recommend or approve some particular construction before work is commenced.

While the number of inspections listed the past year was 262, yet the visits made numbered 521, and it is this latter figure which should be considered as the criterion upon which to base the amount of inspection service rendered.

All new service connections must receive a certificate from this department before the Cambridge Electric Light Company will supply service to the subscriber. This insures that all new work will be inspected. In some cases it has been found that contractors have added lights to old wiring without notifying this department.

TABULATION OF THE INTERIOR WIRING INSPECTIONS MADE IN 1901.

Classification of Inspections.	For C. E. L. Co. Supply.	For Isolated Plant.	Total
Inpections	231	31	262
Visits	435	86	521
Capacity of 16 C. P. incandescent lamps wired	5,631	4,149	9,780
Number of low potential arc lamps installed	3	22	25
Number of motors installed (not including elevator motors)	40	27	67
Horse power of motors installed	167.5	271.25	438.75
Number of elevator motors installed		1	1
Horse power of elevator motors		7.5	7.5

It must be remembered, however, that the total current consumption at any one time is far less than that corresponding to the capacity installed. All inspections made are carefully recorded and indexed, by a card index system, in regard to the main details. These inspection records can be readily obtained at any future time as they are indexed by street and number.

SUPERVISION OF ELECTRIC WIRES AND POLES IN THE STREETS.

This year has seen no long continuous pole line erected in this City, although fifty-six new poles have been set and 305 old poles replaced upon the public streets. The Putnam Avenue pole line of the telephone company has been rebuilt, but that street still continues to be overburdened with poles. Twelve poles of the West End Railway Company could readily be removed without curtailing the facilities enjoyed by that company. This was called to the attention of the City Council last year in the annual report of this department and again would I ask your consideration of it.

This year has seen 305 poles replaced in the streets on account of decay at the butt. Practically all the poles removed were of hard pine stock. It would seem that the ordinary life of such a pole without preservative treatment would not exceed eight or nine years. Owing to the lack of sufficient appropriation this year, no general and complete examination of the poles in this City was made. Such should be done next year and the appropriation should allow of the hiring of sufficient help for this work.

I would again call to the attention of the City Council the desirability of reserving to the City the right to authorize the attachment of wires and cables, municipal or otherwise, to the elevated railway structures wherever the same shall be constructed. This right should be reserved in the order of grant. If this arrangement be made, then practically all poles can be removed from the streets upon which the elevated railway may erect these structures. If, however, a subway should be built instead of an elevated road, then proper conduit facilities for all companies should be furnished.

Sufficient conduit facilities should likewise be prepared for telephone and telegraph, electric light and street railway wires as well as municipal wires on the new Cambridge bridge.

Your City Electrician is glad to report this year that no fatal accidents or serious injuries have been received on any pole in this City due to electrical causes. Last year, however, four fatal accidents were caused by the overhead wires.

Pole Statistics.

Owner.	Number of poles Dec. 1, 1900.	Number of poles Dec. 1, 1901.	Increase in 1901.
Cambridge Electric Light Co.	3,081	3,119	38
New England Tel. & Tel. Co.	949	966	17
Boston Elevated Railway Co. (Iron)	837	838	1
" " " " (Wooden)	25	25	
City	1	1	
Total	4,893	4,949	56

Joint ownership of poles is as follows:—

Cambridge Electric Light Co. and Boston Elevated Railway Co.	760
Cambridge Electric Light Co. and New England Tel. & Tel. Co.	17

Joint occupancy of poles is as follows: —

Cambridge Electric Light Co. on New England Tel. & Tel. Co.	179
New England Tel. & Tel. Co. on Cambridge Electric Light Co.	767
New England Tel. & Tel. Co. on Boston Elevated Railway Co.	108
Boston Elevated Railway Co. on New England Tel. & Tel. Co.	188
Western Union Telegraph Co. on New England Tel. & Tel. Co.	58
Fitchburg Railroad Co. on New England Tel. & Tel. Co.	4
Postal Telegraph Co. on Cambridge Electric Light Co.	41
Number of wire attachments of Cambridge Electric Light Co. to New England Tel. & Tel. Co. poles	859
Number of wire attachments of New England Tel. & Tel. Co. to Cambridge Electric Light Co. poles	2772
Number of permits issued to run telephone wires	435

Conduit Statistics.

The following table shows the ownership, length, and duct feet of conduit laid: —

Owner	Date of Construction.	Length.	Duct feet.
West End Street Railway Company	1897	6,236.3	138,195.1
New England Telephone & Telegraph Co.	1888	11,616.1	75,343.7
" " " " "	1898	55,196.	470,839.4
" " " " " "	1899	5,079.3	28,097.7
" " " " " "	1899 enlargement to 1888 conduit		19,266.9
" " " " " "	1901	907.1	2,721.3
Total		79,034.8	734,464.1

The following table shows ownership, number, length, and duct feet of outlet connections: —

Owner.	Number	Length in Feet	Duct Feet.
New England Telephone & Telegraph Company	120	11,425	14,089
Cambridge Electric Light Company	9	120	120
West End Street Railway Company	7	125	549
Total	136	11,670	14,758

The Telephone Company has furnished forty outlets for the use of the City in their conduit system. Five of these outlets are not laid together with their own telephone outlets.

The City Government granted conduit rights, on November 7, to the New England Telephone Company to extend their conduit system in Cambridge. The grant comprised locations on the following streets: —

Garden Street, from Kirkland to Shepard Street.
Kirkland Street, from Broadway to Garden Street.
Concord Avenue, from Bond to Garden Street.
Mason Street, from Hastings Avenue to Garden Street.
Bay Street, from Massachusetts Avenue to Green Street.
Western Avenue, from Pleasant Street to River Street.
Irving Street, from Broadway to Scott Street.
Massachusetts Avenue, from Putnam Square to Quincy Square.

This year, however, the New England Telephone and Telegraph Company has only installed the following amount of conduit: —

Street.	From	To	Length	Ducts	Duct Feet.
Massachusetts Ave.	Putnam Sq.	Quincy Sq.	907.1	3	2,721.3

Number of manholes, 4.

MUNICIPAL CONDUITS.

The consideration of the City Council I would ask again this year in behalf of municipal conduits, and I would call attention to this brief summary of the history, principles, and advantages to be derived from a municipal conduit system. I will also note the principal provisions of such bills as have been introduced to this end into the Massachusetts Legislature.

Municipal Conduits have received the endorsements of the City Councils of Cambridge for five different years. Pursuant to this idea Cambridge Representatives introduced into the Legislatures of 1893–4–7–1900–1901 bills to allow the cities and towns of this state, excepting Boston, the right to construct and maintain a system of municipal conduits. Two favorable committee reports have been obtained, and the last two years such measures have been passed by the House of Representatives by overwhelming majorities but have failed so far of concurrent action in the Senate.

The importance of taking action at this time is urgent for the reason that a complete municipal conduit system can be built cheaper and better at this time than after the electric light company have installed conduits.

Up to the present time the Cambridge Electric Light Company have installed no conduits. They will, however, desire to do so in the near future unless the City provides such facilities. If the company should build conduits it is evident that such proportion of their total cost must be born by the municipality as the profits accruing from public lighting bears to the total profits. This proportion would not be less than forty-five per cent. The amount that the City would not pay directly would, however, be paid by its own citizens. Moreover, the company would pay five per cent. upon the investment, whereas the City need pay only three and one-half per cent.

Fortunately, Cambridge has so far reserved the right of purchase in all grants to companies for conduit privileges. This has been done so that, when favorable legislation has been secured, such conduits can be purchased and made an integral part of the entire conduit system.

It is conceded by all that the solution of the overhead wire problem is the substitution of underground cables for these wires. The four methods of such a solution may be enumerated as follows: —

Firstly. The execution of a voluntary agreement between the City and the different companies operating pole lines, for the burial of their wires.

Secondly. Compulsory State legislation.

Thirdly. The licensing of a conduit company.

Fourthly. The establishment of a municipal conduit system.

Voluntary agreement between the City and the different companies would assure that a certain amount of wires would be placed under ground each year. Such agreement should, however, provide for the burial of all wires on the same street at the same time. This method would, however, result in a duplication of manholes and an unnecessary occupation of the sub-surface of our streets.

Compulsory legislation would give the City the right to order the wires now strung overhead to be placed underground. This is the method which is pursued in Boston. It is open to the same disadvantages as the previous method.

Compulsory legislation authorizing the granting of an exclusive franchise to a subway company, which will give that company the right for the burial of all wires when the City shall order them placed under ground. This is the method pursued in New York City. New York City, however, reserved the right of purchase after ten years. This, I believe, possesses many advantages over either of the two previous methods.

The establishment of a municipal conduit system would, in my judgement, assure the City of the most complete system at a minimum of cost. This is the method which has been adopted in Baltimore, Md., and which

was also recommended for Washington, D. C., by an expert commission appointed by President Harrison.

The fundamental principle underlying the establishment of municipal conduits is the municipal control of the streets of a city and this is well set forth in the Report of the Special Committee appointed by the Massachusetts Legislature in 1897 to report on the street railway problem. This Commission was composed of Charles Francis Adams, William W. Crapo and Elihu B. Hayes, who reached this one particular and important conclusion, "The ultimate full control of the street and exclusive ownership, whatever may be part of its surface, by the municipality is, it may be said, now accepted in European countries as a fundamental principle of policy." And it should be accepted with us.

The advantages of a municipal conduit system and the reasons advanced for public ownership are these: —

Conduits are a public utility and therefore adapted to public ownership.

Conduits being of a permanent nature of construction require no operating department for their maintenance. They are, therefore, the best adapted of all public utilities for municipal ownership.

The companies own, operate, install, and care for their own cables under municipal supervision, and as there is no divided authority accidents are minimized both for that reason and because of less duplication of interests.

A municipal conduit system will prevent the monopolization of the sub-surface of our streets and will bury all classes of wires at the same time.

A municipal conduit system is cheaper to construct than several conduit systems and will, therefore, allow of a more general adoption of conduits than would be possible under private individual ownership.

Owing to the less cost of municipal conduits, underground service connections can be made with each individual subscriber and consequently dispense with the erection of poles on our public streets for distributing purposes.

The Municipal Conduit Bill is a perfected bill and is so admitted even by its adversaries. It has been before the Legislature for five different years and consequently has all the perfecting amendments as could be devised to suit the corporations and yet preserve the right of the municipalities. The principles and provisions of the bill are these: —

The underlying principle of the Municipal Conduit Bill is the municipal control of the thoroughfares of the cities and towns and is not socialistic.

The bill does not affect the vested rights of any company.

The bill is purely permissive and is one of local option.

The bill applies to cities and towns of this State, excepting Boston.

The bill has a referendum attached.

The bill limits the amount of construction to be done each year and prevents large expenditures.

The bill limits the rental to an equitable amount that can be charged for the use of the conduits.

The bill constitutes the Board of Gas and Electric Light Commissioners as a board of appeal in cases of disputes between the municipalities and the corporations as to form of construction and rentals charged.

The bill provides that the cost of the conduits may be met with an issue of conduit loan bonds, although in many instances it could be paid for out of the annual revenues of a city.

The bill provides that a rental shall be charged to the companies sufficient to meet the requirement of the sinking fund and interests on bonds, and the maintenance, operation and repair of the conduit system.

The opposition of the corporations, especially the telephone company, to this bill has taken the form of opposition along technical lines in order to befog this issue. The real reason for this opposition is that it would allow competition if that should be deemed desirable.

This year, before the legislative committee, the form of conduit construction recommended by Cambridge was admitted by the experts of the remonstrants to be safe and in successful operation in New York and other cities. It received, moreover, the approval of the only two engineers upon the legislative committee before which the representatives of this City appeared in 1900 and 1901.

Municipal conduits have already been adopted for Baltimore, Md., which has appropriated $1,000,000.00 for this work.

Municipal conduits were also recommended for Washington by an expert commission appointed by President Harrison. Chicago is to undertake the construction of a combined conduit system on Atcher Avenue for the joint occupancy of the telegraph, telephone, electric light and city wires.

This legislation for municipal conduits was asked for the past year, by Cambridge, Worcester, Springfield, Lowell, Pittsfield, Brockton, Fitchburg, New Bedford, Gloucester, Quincy, Everett, Melrose. These cities, by the census of 1900, have a population of over 610,000 people.

ELECTRICAL CONSTRUCTION WORK.

This year has seen little construction done outside of that on the Fire Alarm and Police Signal Systems. Many cases where it would have been possible, such work could not be done for the men could not be

spared for that purpose, especially since the department has one man less than during the past several years. This department has, however, as has been customary in the past years, looked after the electric bells, batteries, etc., in the public buildings. In many instances cases of repair work have been done on electric light wires for the Building Department. Such work has, however, been paid for by that department.

CONSULTING ELECTRICAL ENGINEERING FOR THE MUNICIPAL DEPARTMENTS.

This year has seen very little engineering work done by this department for other departments, as few requests for such service have been made. One report has been made on the electrolysis of a water pipe in Putnam Square, for the Water Department. Advice has been given, specifications drawn, and work supervised for the installation of electric lights in several schoolhouses. This has been done at the request of the Superintendent of Public Buildings.

A question that could well be considered is the installation of an electric light plant at the Ringe Manual Training School, to light that school, the two high schools and the library. Such a plant could also serve the purpose of instruction at that school.

GENERAL EXPERT WORK FOR THE CITY.

The subject of municipal conduits absorbed the attention of your City Electrician again this year. Many evenings were spent with the City Solicitor upon this work, in visitation and preparation of our case for the Legislative Committee. Your City Electrician also visited several cities and obtained their aid in behalf of this bill as well as that of the press in different cities.

FIRE ALARM SYSTEM.

Many important improvements contemplated for the past year had to be forgone for lack of appropriation. The condition of the system, therefore, remains as it was a year ago.

A statistical review of the system shows the following figures: —

Central station equipment	1
Fire alarm boxes on the streets	101
Fire alarm boxes on private premises	25
Fire alarm boxes equipped with keyless doors	29
Fire alarm boxes equipped with glass key boxes	11
Length of circuit wires in system in miles	90

Tower bells connected with system	10
Steam whistles connected with system	3
Tappers in firemen's residences	52
Tappers in factories where firemen work	10
Tappers in permanent men's residences	24
Tappers in call men's residences	28
Tappers in electrical department men's residences	5
Telephones connected with the system	22
Number of bell alarms sounded the past year	208
Number of second alarms sounded the past year	2
Number of third or general alarms sounded	none
Number of "no school" alarms sounded the past year	7

One of the inconsistancies of human foresight is shown by the following considerations. It is the desire of all to give an alarm of fire in as rapid a manner as possible. To do this they demand that the speed of signalling be increased and that the alarm be transmitted direct from the box itself, without opportunities for verification of its correctness. This in itself may be very well, but to gain a few seconds of time in this manner and lose at some other point is not consistent. This is the result in this City, from the fact that this City lacks keyless doors for its fire alarm boxes. A person, to give an alarm of fire, is obliged, in most cases, to go to the box, read the sign, and then hunt up the key holder, obtain the key, and return to the box again and pull in the alarm. The time consumed in this operation far exceeds that of actually transmitting an alarm of fire. For this reason, I earnestly request that sufficient appropriation be made the ensuing year to equip the seventy-two fire alarm boxes now unprovided with keyless doors with such device.

This year again must I ask the consideration of the City Council to the recommendations of last year, and of preceeding years. These recommendations I will quote: —

"To further improve the service I would recommend the purchase of a duplicate set of storage batteries, so that we can operate our system with batteries by day as well as by night. The switchboard and battery racks have been constructed and wired with this object in view, so that the only additional expense would be in the cost of the batteries. I would also recommend the operation of our fast time circuits from batteries rather than from the present generators.

Your Inspector would again ask this year that a sufficient appropriation be made to allow the department to equip its fire alarm boxes, which are not yet provided with a non–interference pull with such a device. These pulls, if installed, would prevent the liability of a mixed up alarm from one of these boxes, due to the pulling of the box several times in rapid succession. He would also recommend the substituting of reverse current magnets in place of direct acting magnets in the tower strikers and whistles. This would obviate the present need of relays and local batteries, and would therefore render the service more reliable.

Again this year would your Inspector recommend that sufficient appropriation be made for the ensuing year to allow for a night operator at our Central Station. At the present time, the City is dependent upon the members of the day force who sleep in the Central Station for the transmitting of an alarm of fire at night. This, of course, requires that such members shall be suddenly awakened from sleep in order to transmit the alarm without loss of time. The strain thus thrust upon the operator has been such that it has resulted in the breaking down of the health of two members during the past five years, and who were, therefore, compelled to resign from the service. This position is a responsible one, and ought to have an operator continually on duty by night as well as by day.

This year must your Inspector call the attention of the City Council to the obvious need of a new Central Fire Alarm Station as well as providing for the burial of the wires of both the Fire Alarm and Police Signal Systems.

The necessity of a Central Fire Alarm Station is made prominent by two factors. First, the unsuitability of the present Central Station in its present arrangements and housing. Secondly, from the fact that the time has now come for the City to bury its wires. When this is done it should be arranged so that they may remain undisturbed for a period of years, and consequently the center of distribution of such a system should remain fixed. If such a provision be not made then much necessary expense will later fall upon the City if this center of distribution be changed. This necessitates, therefore, that the location of the Central Fire Alarm Station be now fixed for the future.

The Fire Alarm System is to the Fire Department what the signal system on board a battleship is to the gun crews. In this latter case the system centralizes in the conning tower and is therefore most carefully protected from all injury as far as it is possible to do so. Likewise in the case of a City Fire Alarm System, the center of distribution or Central Station should be protected from fire or injury as much as possible. Likewise its distributing wires should be placed underground to assure the continuous operation of such a system.

The present Fire Alarm Headquarters are located on the third floor of the Brattle Square Building. This building itself is far from being fireproof, and, moreover, is occupied for several different purposes. It should be borne in mind that even if the Fire Alarm System quarters did not take fire, but should be drenched with water in case of fire in another part of the building, that this would probably result in a paralyzing of the Fire Alarm System for a short period of time at least.

There are at the present time entering this station, independent of the Police Signal System, twenty-one metalic circuits, numbering forty-two wires. This comprises ten box circuits, three fast-time circuits, two local circuits, and six telephone circuits.

The present apparatus room is not conveniently situated in respect to the other rooms of the department. The individual pieces of apparatus and their wiring is not so mounted as to be readily accessible. The apparatus should all be mounted upon slate, and arranged as in all new model central stations in conformity with good engineering practice. While

many improvements have been made towards this end, yet it will be impossible to remedy this without entirely renovating the present Central office.

In addition to these defects, there is not a properly equipped work shop or store room for the use of this department. The emergency wagon is kept in a basement totally unfit for such use, and the horse for the same is kept upstairs in Truck No. 1's house. The other two teams of the department are kept at private stables.

Your Inspector, therefore, urgently requests that steps be taken the beginning of the ensuing year to decide whether a new Fire Alarm Station shall be built, and where, in order that the fire alarm wires may be put underground next year. The City has at present 14.7 miles of duct ready to receive the wires."

A reliable automatic time stamp should also be installed in the Central office in order to automatically record the time an alarm of fire is received for the present arrangement is not sufficiently accurate.

During the past year no additional fire alarm boxes have been added for lack of funds, although they are urgently needed in many localities. There are at present six petitions for fire alarm boxes on file in this office awaiting an appropriation for such purpose.

I would respectfully ask your consideration for the Fire Alarm Signal System as the efficiency of the fire department is dependent to a great extent upon the efficiency of its Fire Alarm System.

POLICE SIGNAL SYSTEM.

Again this year must your Inspector call your attention to the poor service of the Police Signal System in regard to its telephonic facilities. It must be conceded by all that one, if not the most essential, services to be performed by any Police Signal System is the providing proper telephonic communication between the street signal box and the police station. The importance of this service, moreover, is greater at night than during the day. I regret to say such service is not properly provided for by our signal system in a large number of cases. The signal system of Station No. 1 is practically useless at night on this account. The cause of this trouble is the induced currents set up in the police signal wires on account of their proximity to electric light wires. The remedy for such is to neutralize these induced currents by the use of twisted pair cables. The cables can be strung overhead or run underground. The latter is far preferable as such construction would be permanent. It would cost about $5,000 to equip District No. 1 with overhead cable. This money could far better be spent in permanent construction for it is only a question of time when the overhead wires must all be buried.

The City could at the present time, if provided with cable, reach over 50 per cent. of its patrol boxes through ducts reserved for municipal wires. The remaining boxes could be reached by short sections of overhead cable. For the past four years your Inspector has sought to secure sufficient appropriation for such purpose but without avail. He notes, with pleasure, that the Mayor has already called the attention of the City Council to the necessity of some action being taken in this matter.

The Police Signal System equipment is as follows :—

Three complete station equipments.
Two patrol wagon house equipments.
Eighty street patrol boxes.
A five station private telephone system.
Forty-five miles of circuit wires.

From Lafayette Square to Harvard Bridge the wires on Massachusetts Avenue are in underground ducts. The police signal wires connected with the box at City Hall are underground from the corner of Green and Pleasant Street. The rest of the wires connected with the system are strung overhead.

A spare time stamp is urgently needed in order that the present time stamps can be overhauled and cleaned at regular intervals. This cannot be done at present without depriving the station table of its automatic time stamp.

The appropriation the ensuing year should provide for the installing of at least six new patrol boxes.

FINANCIAL STATISTICS RELATING TO THE FIRE ALARM AND POLICE SIGNAL SYSTEMS.

Your Inspector would ask your careful consideration of the following tabulation of the financial condition of the Wire Department for the past eight years. This tabulation shows the appropriation for the maintenance of the Wire Department before and after its consolidation into the Electrical Department.

Year.	Appropriation.	Equivalent Appropriation.
1893	$ 9,645	$10,770
1894	10,148	11,150
1895	10,400	11,130
1896	12,000	12,250
1897	10,700	10,800
1898	11,200	10,050
1899	14,500	14,500
1900	10,600	10,600
1901	10,500	10,500

Until 1897 the expense of the Police Signal System in the purchase of supplies was borne by the Police Department. The amount expended each year on this account (as nearly as could be estimated from the auditor's reports) that was paid by the Police Department has been added to the Wire Department appropriation for those years. This total amount has been given as the equivalent appropriation for a basis of comparison. Since 1898, this department has paid $100.00 a year to the Building Department for heating of its rooms and this amount has been added to the expenditures of the years before. In 1898, an additional expense of $1,050 was necessitated on account of a blizzard, but this amount has been subtracted from the annual appropriation for that year, so that in 1898, the equivalent appropriation as given is less than the annual appropriation.

The fixed expenses of the department are as follows: —

Pay-rolls and salary	$7,100 00
Telephone charges including rental for leased instruments	400 00
Central Station heating, lighting, laundry, furnishings	200 00
Horse board and carriage repairs	500 00
Miscellaneous fixed expenses	200 00
Total fixed charges	$8,400 00

It will thus be seen that upon an appropriation basis of $10,500 only about $2,600 is available for the purchase of all line materials, hardware, battery and electrical apparatus, and supplies of all kinds. In other words, only about 25 per cent. of the appropriation is available for the purchase of all materials and supplies and apparatus for maintenance, extension and improvement of the Fire Alarm and Police Signal Systems.

The following tabulation will show briefly, the increase in department work in different branches since 1893.

Increase in number of fire alarm boxes	26 or	28	per cent.
Increase in number of patrol boxes	35 "	77 "	"
Increase in length of circuit wires in miles	25 "	22 "	"
Increase in number of wire inspections since 1895 only	129 "	100 "	"

All this requires additional labor and expenses, yet the working force today is the same in number as in 1894.

I would respectfully ask that, is it not self evident from the above, that additional improvements, and perfection of the Fire Alarm and Police Signal Systems been prohibited to a large extent?

The following is an inventory of the Wire Division, which is taken at the same figures as last year. The inventory is less than the cost of construction but exceeds a fair market value.

INVENTORY OF THE WIRE DIVISION.

Fire alarm apparatus and machinery	$13,320 00
Fire alarm supply and reserve apparatus	910 00
Fire alarm circuit wires and cross arms	2,050 00
Ninety-six fire alarm boxes	5,680 00
Police signal apparatus and machinery	3,050 00
Police signal supply and reserve apparatus	150 00
Police signal circuit wires and cross arms	2,320 00
Police signal, one-tenth mile of cable	165 00
Eighty police signal boxes	11,850 00
Testing instruments	465 00
Tools	550 00
Furnishings	450 00
Stock on hand	700 00
Old and unused apparatus (depreciated value)	600 00
Miscellaneous supplies	130 00
Horses and teams	260 00
Bell tower in Belmont school yard	400 00
	$43,050 00

REPORT OF STREET LIGHTING DIVISION.

In compliance with the ordinances the financial and statistical statement relating to street lighting is herewith submitted: —

FINANCIAL STATEMENT.

A more detailed account can be found in the Auditor's report.

The amount appropriated	$73,000 00
Transferred to Contingent Fund	200 00
Balance unexpended	24 25

The principal items of expense are as follows: —

For arc lighting	$51,071 33
For incandescent lighting	11,560 26
For Welsbach gas lighting	8,537 59
Salary of Superintendent	1,000 00

The expense for electric lighting has been as follows: —

ARC LAMPS.

Amount of bills rendered	$51,395 83
Amount of deduction for outage	324 50
Amount expended for arc lighting	$51,071 33

INCANDESCENT LAMPS.

Amount of bills rendered	$11,579 26
Amount of deduction for outage	19 00
Amount expended for incandescent lighting	$11,560 26

The expense for gas lighting has been as follows :—

WELSBACH GAS LAMPS.

Amount of bills rendered	$8,551 67
Amount of deduction for outage	14 08
Amount expended for Welsbach gas lighting	$8,537 59

STATISTICAL STATEMENT.

The number of hours in which one or more lamps failed to burn is :—

For arc lamps	8,112
For incandescent lamps	1,900
For Welsbach gas lamps	1,408
Total outage hours for all lamps for year 1901	11,420

The total numbers of different types of lamps on thoroughfares, parks and bridges maintained by the different City departments on November 30, 1901, is as follows :—

	Maintained by Lamp Department.	Park Department.	Bridge Department.	Totals.
Arc lamps	522½*	14	13	549½*
Incandescent lamps	405	2	42	449
Welsbach gas lamps	283	2		285
Welsbach naptha lamps		103		103
Total lamps	1,210 ½*	121	55	1,386½*

Grand total number of street, park and bridge lamps maintained in the City of Cambridge on November 30, 1901, 1,386½*.

* Half of the expense of one arc lamp borne by private parties.

INVENTORY OF LAMP DIVISION.

283 lamp posts set in streets, at $10.00	$2,830 00
Office furniture	250 00
Stock on hand in City Hall	100 00
Stock on hand in Central Square Building	280 00
Horse and team	440 00
	$3,900 00

This inventory does not take account of any unused lamp posts which remain upon the public streets, in as much as the number is not known and in many cases the ownership, whether municipal or private, is doubtful.

TABULATION SHOWING APPROPRIATION EXPENDED AND NUMBER OF LAMPS MAINTAINED EACH YEAR FROM 1890 TO 1901, INCLUSIVE, WITH OUTAGE HOURS FOR ELECTRIC LIGHTS.

Year.	Appropriation Expended.	Number of Oil Lamps.	Number of Gas Lamps.	Number of Welsbach Gas Lamps.	Number of Incandescents.	Number of Arc Lamps.	Total Number of Lamps.	Outage hours for Electric Lamps.
1890	$49,269 02	98	722 4 feet		197 32 c. p.	116 2000 c. p.	1,133	17,457
1891	47,989 92	98 7 naptha	637		143	164	1,049	36,805
1892	63,862 68	56	299 5 feet		114	437 1200 c. p.	906	10,254
1893	66,615 93	32	300		168	447	947	7,166
1894	68,988 81	29	302		204	447	982	8,502
1895	69,926 61	25	296		233	448	1,002	6,776
1896	67,325 31	24	287		266 40 c. p.	471	1,048	7,027
1897	69,264 96	23	21	259	297	498	1,098	9,616
1898	69,182 20			266	363	515	1,144	56,194
1899	71,980 42			280	369†	507†	1,156†	8,479
1900	71,998 78			286	387	512½*	1,185½*	7,122
1901	72,775 75			283	405	522½*	1,210½*	10,012

* Half the expense of one arc lamp maintained by private party.

† Park Department maintains 14 arcs and 2 incandescents formerly maintained by this department.

TABULATION SHOWING COST PER LAMP PER YEAR FROM 1890 TO 1901, INCLUSIVE, WITH NUMBER OF HOURS EACH LAMP BURNED.

Year.	Oil Lamps.		Gas Lamps.			Welsbach Gas Lamps.		Incandescent Lamps.			Arc Lamps.		
	Annual Cost per Lamp.	Hours of Lighting.	Annual Cost per Lamp.	Hours of Lighting.	Size of Burner.	Annual Cost per Lamp.	Hours of Lighting.	Annual Cost per Lamp.	Hours of Lighting.	Candle Power.	Annual Cost per Lamp.	Hours of Lighting.	Candle Power.
1890	$12 74	3,6 4	$29 71	3,694	4-foot burner			$30 00		32 c. p.	$180 00		2,000 c. p.
1891	14 43	3,833	29 14	3,833	4-foot burner			30 00	3,953	32 c. p.	180 00 115 00	3,953 4,000	2,000 c. p. 1,200 c. p.
1892	16 10	3,676	33 13	3,676	5-foot burner			30 00	4,000	32 c. p.	115 00	4,000	1,200 c. p.
1893	16 22		32 77		5-foot burner			30 00	4,000	32 c. p.	115 00	4,000	1,200 c. p.
1894	16 39	3,270	33 47	3,270	5-foot burner			30 00	4,000	32 c. p.	115 00	4,000	1 200 c. p.
1895	17 79	3,566	32 90	3,566	5-foot burner			30 00	4,000	32 c. p.	115 00	4,000	1,200 c. p.
1896	17 40	3,628	33 15	3,628	5-foot burner			30 00	3,900	32 c. p. 40 c. p.	115 00 100 00	3,900	1,200 c. p.
1897	17 78	3,628	32 41	3,628	5-foot burner			30 00	3,900	40 c. p.	100 00	3,900	1,200 c p.
1898						$29 88	3,700	30 00	3,900	40 c. p.	100 00	3,900	1,200 c. p.
1899						29 88	3,900	30 00	3,900	40 c. p.	100 00	3,900	1,200 c. p.
1900						29 88	3,900	30 00	3,900	40 c. p.	100 00	3,900	1,200 c. p.
1901						29 88	3,900	30 00	3,900	40 c. p.	100 00	3,900	1,200 c. p.

Three types of lamps are now maintained by this department, namely, arc, series incandescent lamps and Welsbach gas lamps. All of these lamps are lighted from dusk to dawn, each and every night, and burn under a schedule of 3,900 hours of lighting per year. Each of these types of lamps has its relative advantage if price be considered, and its suitability must be determined for each individual case.

The arc lamps are the open type sub-arc 1,200 candle power, so-called, consuming 6.8 amperes of current, and cost $100.00 per year.

The incandescent lamps are of the series type of 6.8 amperes and forty candle power, and cost $30.00 per year.

The Welsbach gas lamps consuming three cubic feet of gas per hour and of sixty candle power, cost $29.88 per year.

The entire cost of installation of the electric lamps is borne by the contracting company, while the lamp posts for the Welsbach gas lamps are erected at the expense of the City, but the lanterns are furnished by the Welsbach Company.

The condition of city lighting for the past eleven years is shown by the tabulations which give the annual appropriations, number and kind of lamps, cost per lamp, the candle power and hours of burning.

Bridge and park lamps are now maintained by their respective departments, while formerly all the park lamps were maintained by this department.

I would ask the City Council's consideration of the following abstract taken from last year's report.

"One of the most serious difficulties encountered in lighting this City arises from the fact that the streets are in many cases not continuous. This means that one lamp which would ordinarily light in four directions will only light in three directions, or, in other words, 25 per cent. of the light is lost for street illumination. These cases, which are numerous, require additional lights and involve a large annual expense.

In many cases in this City the arc lamps are located at street corners on one street and on the next parallel street they are placed midway between the intersecting streets. This was done to avoid expense, as it requires one less lamp for streets so lighted. It has, however, this serious difficulty, that the lamp placed in the center of the block lights in only two directions, whereas, if placed at street intersections it would light in four directions. I would therefore recommend that this method of arrangement be changed and that the arc lamps, so far as possible and practical, be placed at street intersections. If illumination is necessary between the intersecting streets, an incandescent lamp can be installed."

In several cases the past year this change has been made, so that the cross streets between Cambridge and Charles Street in East Cambridge from First to Ninth Street and Brookline, Pearl and Magazine Street in

Ward Four have been greatly improved by the locating of lamps at street corners. The lighting on Vine Street, East Cambridge still remains as formerly with lamps located between blocks, but should be changed to street intersections.

Another difficulty to contend with in the proper lighting of streets in this City is the heavy tree foliage. As the Park Department had no funds available for trimming the trees this Fall, your Superintendent had such trimming done at the expense of this department. Over 120 lamps were reported to that department where such trimming was necessary. The result of this trimming has been noticeable, but the full benefits will be apparent in the Spring, on the appearance of the foliage.

The contracts for street lighting this year were renewed with both the Cambridge Electric Light Company and the Welsbach Street Lighting Company. The electric lighting contract was renewed under the same terms and conditions, while that made with the Welsbach Company was made anew. Under the terms of that contract the Welsbach Company agrees to paint the lamp posts, which they did not formerly do, and also to substitute the Boulevard type of lantern for the Standard type. With those exceptions, the contract was practically the same. In compliance with the contract, the Welsbach Company have painted the lamp posts and equipped them with the Boulevard type of lantern. The improvement is very noticeable in appearance and undoubtedly will increase the efficiency of the service.

The Cambridge Electric Light Company are now erecting a new Central Station, which will soon be completed. It, therefore, should be decided at this time what type of lamp is best suited for street lighting in a large city. This should be done this winter, in order that the proper machinery may be installed in the electric light station before it is occupied next Spring. The decision now made would be for a future decade and, therefore, should recieve thorough and careful investigation in this and neighboring cities.

To the Chairman and members of the Lamp and Wire Committee, I desire to extend my thanks for the courtesy shown me the past year.

CHARLES F. HOPEWELL,
Inspector of Wires.
Superintendent of Lamps.
Acting City Electrician.

REPORT OF THE BOARD OF PARK COMMISSIONERS

To the Honorable, the City Council of the City of Cambridge:—

GENTLEMEN:—The Board of Park Commissioners has the honor to submit herewith its ninth annual report for the year ending November 30, 1901, and also the eighth annual report of the General Superintendent of Parks, as required by Section 4 of the Ordinance establishing a Park Department.

WORK ACCOMPLISHED IN 1901.

During the year 1901 there has been spent and charged to Construction the sum of $136,270.29, as follows:—

Filling Esplanade, Section C	$46,437 21	
Riverside Press, in settlement of damages for land taken	35,000 00	
Cambridge Electric Light Co., in settlement of damages for land taken	25,000 00	
General accounts, office expenses, nursery, etc.	18,973 65	
Road and beach, east of Boylston Street	5,662 84	
Cambridge Field, Cinder track	2,281 55	
Hastings Square	1,739 46	
Bath House, Captain's Island	1,175 58	
		$136,270 29

The foregoing shows in brief what has been done during the year.

By the takings of the ownership on the river of the Electric Light Company and Riverside Press, the City has acquired the entire river front from Gerry's Landing to Craigie Bridge, excepting only the property between West Boston Bridge and the East Cambridge Embankment, consisting of a strip about 1,200 feet long.

Inasmuch as the City has already taken so large a portion of the river front between West Boston and Craigie Bridges, it is probably only a question of time before it must acquire the rest in order to carry out a continuous, harmonious scheme of shore ownership. It is probably true that it will cost the City less to take it now than at any time in the future but whether the City is ready to do so may be a question.

The Commissioners are not at present prepared to make any recommendation of a taking for the reason that it seems to them wiser to use

the money at their disposal in continuing the driveway to Brookline Street in order to open up the territory newly filled this last year.

The settlements with the Cambridge Electric Light Company and the Riverside Press were the culmination of long protracted negotiations covering several years time. The Commissioners believe that the prices paid by the City were on the whole satisfactory especially taking into consideration the fact that by the terms of the settlements the use of the river for commercial purposes by these two concerns was eliminated.

It is a fact that by virtue of the City's ownership of the river bank from West Boston Bridge to Gerry's Landing, there is no longer any use of the river for commercial purposes so far as Cambridge is concerned; indeed the only concerns on the Boston side of the river as far as Watertown dam which have any right to use the river are the Brookline Gas Company at River Street, the Abattoir at Brighton, and a lumber concern near Cottage Farm and only an infrequent use is made by either.

These facts will undoubtedly have considerable weight with the Commissioners recently appointed by the Governor under the provisions of Chapter 105 of the Resolves of 1901 to consider and report as to the desirability and feasibility of a dam across the river near Craigie Bridge.

The matter of the proposed dam is one which is of particular interest to Cambridge. When the question came up before the Legislature in 1898 as to the location of a dam at St. Mary's Street in Brookline, it was favored by everyone. The reasons which influenced them will apply equally to the proposed location at Craigie Bridge, provided, of course, that the property interests on Broad Canal are properly cared for by the erection and maintenance of proper locks in the dam and by making provision for any necessary dredging by the State of the canal and of the channel leading to it, if it shall be found that the dam has any tendency to cause a shoaling so as to prevent the passage of deep laden vessels. That all Cambridge would be beautified by a constant level of water in the river needs in proof but a visit to any part of the river bank at high tide.

The demand for increased bathing facilities at Captain's Island forced the Commissioners to construct another temporary bath house. The number of bathers in the aggregate was less during the summer of 1901 than in 1900. This is due partly to the fact that the cool weather came on earlier during the last summer and partly because the water was not very clean or inviting at any time through the summer, owing to the fact that the hydraulic dredging below Brookline Bridge fouled the water by stirring up the mud at the bottom and the tides carried it up to the beach and deposited much of it on or at the foot of the beach. This will not happen again in all probability.

The City government has during the year referred to us suggestions for a bathing beach at East Cambridge Embankment as also at or near the site of Richardson & Bacon's Coal Wharf near the foot of Holyoke Street.

The Commissioners have not been able to recommend the adoption of either suggestion. No plan for the construction of a beach at the Embankment can be considered until the question as to the construction of a dam at Craigie Bridge is decided. One kind of construction cannot properly be made to answer under both conditions.

A bathing beach at or near Richardson & Bacon's Coal Wharf is an impossibility without a further taking of land, and this is true of any point between Boylston Street and Western Avenue. A safe bathing beach requires a set-back of three hundred feet and the bath houses forty feet more, or three hundred forty feet in all. The park roads, walks, planting and tree spaces require ninety feet of set-back. The total width is then four hundred thirty feet. The City has taken a width of three hundred feet, showing a deficiency of one hundred thirty feet. Besides this the Commissioners would not favor a bathing beach adjacent to the river road and private property without a distance of at least two hundred twenty-five feet separating them. The result is that an additional taking of three hundred fifty-five feet would be required, necessitating the disuse of Dyke Street or DeWolf Street or both, the removal of many buildings of good character and the acquirement of considerable valuable land. The cost of acquirement and construction would be prohibitive. In addition the river road would have to be deflected from the river and from its natural continuation, and this from an artistic standpoint would be very objectionable.

The principal construction work of the year has been in the extension of the Esplanade up to Brookline Street Bridge.

It will be remembered that the Charles River Embankment Company and others completed in 1893 a sea-wall for a distance along the river on both sides of Harvard Bridge of about 3,770 feet and filled in the flats back of the wall to the Grand Junction tracks. There was left from the end of the sea-wall to the railroad bridge a distance of about 2,550 feet and an area of flats and marshes mostly exposed at all except high tides of about twenty-five and one-half acres running back to the Grand Junction Railroad divided into a number of separate ownerships. After considerable delay an agreement was finally entered into by the City and the New England Dredging Company for the filling by hydraulic process of the City's frontage and an agreement by the owners of the flats and by the New England Dredging Company for their filling. Work under both contracts was begun in the spring and was finished during the fall.

This work adds a redeemed area of about fifteen and one-half acres to the taxable property of the City, clears up a filthy and unsightly marsh, takes an immense amount of visible and invisible flats from the river to an extent that even at low tide no flats are now to be seen on the Cambridge side of the river, clears the bottom of the river of its accumulations of ages and furnishes the opportunity for the extension of the Esplanade to Brookline Street.

The remaining construction work of the year was the beginning in October of the extension of the river beach and driveway from Boylston Street down river. Not much has been accomplished in this direction except to remove the coal sheds and boathouses on the property and to cut down the filled wharves to beach grade using the dirt for grading the driveway.

FINANCIAL STATEMENT.

There have been issued to date in payment for park construction, bonds to the amount of $1,299,368.44.

The interest and sinking fund charges thence in 1901 were	$66,088 33
The cost of maintenance (deducting revenue appropriated) was . .	22,041 59
Total	$88,129 92

The cost per capita was ninety-six cents. Of the tax rate of $16.90 for 1901, ninety-two cents thereof is chargeable to park construction and maintenance.

In other words if one pays a tax on $10,000.00 of $169.00, $9.20 of it is the amount which the park work of the City has cost him in 1901; or to put it in another way if the City had no Cambridge Field or Shelter, no East Cambridge Embankment, no Esplanade, no bathing beach, no river driveways, simply a continuous river frontage of marsh mud with all its accompaniments, his tax rate in 1901 would have been $15.98 instead of $16.90. This is not strictly true, however, because no allowance has been made for the increase in taxable property caused by the existence of the park inprovements. Were it not for these improvements the tax rate of 1901 would have been much larger. By these improvements the tax rate has been lessened. The parks should not be charged with the whole cost of construction and maintenance because by them have valuations been increased and the tax rate therefore reduced.

A fair illustration of the above is shown by a comparison of valuations of the property abutting on Cambridge Field. Before the territory now covered by the Field was developed, the adjacent property was valued at $936,100. In 1898, after construction of the Field and after valuations

had an opportunity to settle themselves, the same property was assessed for $1,661,600. In 1901 the property was assessed at $1,777,900. These assessments were not excessive as has been proved over and over again by sales of the property in excess of assessed valuation.

It is interesting also, to note that the receipts during 1901 from taxation of the one completed building on the Esplanade, and the land on which it stands, are about sufficient to pay the interest, sinking fund charges and maintenance of that part of the Esplanade lying about one thousand five hundred feet either side of Massachusetts Avenue. The other new buildings were not sufficiently advanced to be assessed during 1901.

UNSETTLED CLAIMS.

The claim of Norcross Brothers against the City for damages of the taking of the frontage of their property at the foot of Brookline Street is in litigation. The Commissioners to whom the matter was referred have awarded them $20,000. It is probable that the award will be accepted by the parties.

The claim of the heirs of Martin Smith for damages for cutting off access to their coal wharf on Main Street by filling in of the Esplanade, is in suit and is undetermined.

The claims of Ellen M. Dinsmore for the taking of a small piece of land on Bath Street, of D. J. O'Brien for the taking of a small piece of land near Boylston Street, and of the Riverside Boat Club for the taking of their house and land at Section E., are in litigation and unsettled.

Other than the above all claims have been disposed of.

WORK OF THE COMING YEAR.

The Commissioners strongly renew their recommendation of last year that the river driveway be extended from its present terminus above Harvard Bridge to Brookline Street. It has been determined to carry the sea-wall only two hundred eighty feet further up the river, at that point reaching a turn in the river; from thence to Brookline Street it is proposed to beach the shore and to construct a single driveway in continuation of the present inner driveway.

It is essential to the early and proper development of the water front that the driveway be carried to Brookline Street; there is nothing in the park work so peremptory as this, nothing that will secure such quick returns on the outlay. It promises to be the great pleasure driveway circuit of the district by making use of Harvard and Cottage Farm Bridges and the two banks of the river.

The extension of the driveway and beach from Boylston Street to Flagg Street is also earnestly recommended. This can be done with a comparatively small expenditure and is valuable as affording an outlet from Boylston Street to the lower part of Ward 4, and properly anticipates the march of progress in the development by college interests of the property between Mt. Auburn Street and the river.

SCHOOLHOUSE GROUNDS.

It may not be entirely understood that several years ago all public grounds were placed in charge of the Park Commissioners including the grounds around all schoolhouses, and that such have to be cared for out of the amount annually appropriated to this department for maintenance. With few exceptions the grounds around our schoolhouses are in a very delapitated condition and have been so ever since the care of them has been placed in our charge. In making up our estimates at the beginning of each year we have always included an amount to be used for the care of the schoolhouse grounds but have never been able to secure it. Until we do secure it we can do nothing.

TREES.

The Commissioners have never been able to properly care for the City's shade trees because of the insufficiency of the maintenance appropriation. There are many tree stumps and dead and dying trees which should be removed; a great many trees with dead and dying branches which are a menace to safety and a great many instances where trees should be thinned out or removed to permit proper growth of others or to decrease the increased shading of streets and property. In addition the ravages of the brown-tail moth and elm-leaf beetle are increasing and will continue to increase unless immediate steps are taken for their removal. The Commissioners were able to do some work during the spring in extermination of the insects but by no means as much as they desired. A practical difficulty was met in the failure of private owners to examine trees on their property and to remove the pests. Legislation will be asked for at the coming session permitting the Commissioners to enter on private property and destroy the insects.

CONNECTIONS WITH STATE RESERVATIONS.

Cambridge has no ready access to any portion of the State Reservations or Boston Park System.

Cambridge pays or will pay more towards the cost of the State Reservation than any other city excepting Boston, in the Metropolitan Dis-

trict. Cambridge has spent more money on public reservations than any other city except Boston, in the district, and has spent more money per capita than even Boston, yet she is practically the only city or town in the district with no access to that to the expense of which she has paid so large a part. Cambridge has not asked the State to build any parks or public reservations in her limits, neither has the State done so. There is hardly another town or city in the district without a portion at least of a State Reservation within its limits; a boulevard connecting Mt. Auburn Street with Huron Avenue is all that Cambridge has received.

We have asked heretofore in vain and very likely now ask in vain, nevertheless we propose to continue to ask that we shall be given access at least to the other reservations. We have asked and again ask for the connection between Fresh Pond and the Mystic, between Somerville and Cambridgeport, between Gerry's Landing and the Speedway, between Brookline Street and St. Mary's Street. None of these places can be reached from any part of Cambridge without circuitous travel, without encountering poor roads and other annoyances. It is to be remembered also that these same connections will open the beauties of our own Park System to residents of other towns. The Charles River is to become the great popular pleasure resort of Massachusetts. When the improvement of banks of the river is completed, when the water is at a constant level, when the current is moderate instead of swift, when the water is clean instead of foul, when the river is shaded by the growth of the trees which are being rapidly and systematically planted along its banks, when those same trees form a beautiful arched canopy over the narrow winding river, when the surface of the water is dotted with pleasure boats of all descriptions seeking relief from the hot city streets, whatever gratitude may be felt or expressed will be due to Cambridge, without whom this would not have been possible.

THE FUTURE.

The pressure increases, never decreases. Demands multiply in the wrong ratio. Suggestions of additional bathing beaches, additional play grounds, new boulevards, a gymnasium for Cambridge Field and other lesser matters furnish ample use for money and thought. The Commissioners fully recognize the desirability of these suggestions and could add many more of their own to the list. The Commissioners feel, however, that expenditures should lie in the direction of producing the best results. In our judgment it is more important to redeem our river front, increase valuations, and lessen the burden of taxes than to provide luxuries. When our river development has reached that point when it is practically paid for by increased valuations, it will be time to make plans for additional pleasure grounds.

The Commissioners therefore urge again the continuation of the work on the river front, especially from Harvard Bridge to Brookline Street.

Of the $500,000 which the Legislature in 1899 authorized the City to borrow, $300,000 has been spent. The remaining $200,000 should be used towards the completion of the river drive and beach. Probably it will not be sufficient to complete the work but it will go a long ways towards it.

FINANCIAL STATEMENT.

PARK LOAN.

Amount of unused balance of 1900 appropriation reappropriated Dec. 6, 1900	$42,593 18
Amount appropriated March 30, 1901	100,000 00
	$142,593 18

PARK MAINTENANCE.

Amount appropriated March 30, 1901	$21,500 00
Amount appropriated June 19, 1901	600 00
Amount appropriated Oct 31, 1901	1,450 00
Revenue from bath houses (above $1,500)	203 85
	$23,753 85

During the year bills payable from Park Loans have been approved by the Board and certified to the Auditor to the total amount of $136,270.29, as follows:—

PARK LANDS AND CONSTRUCTION.

River Parkway, Section A.		
Construction account	$473 84	$473 84
River Parkway, Section B.		
Construction account	3,954 83	3,954 83
River Parkway, Section C.		
Construction account	46,437 21	
Land account	1,843 75	
		48,280 96
River Parkway, Section D.		
Construction account	6,079 93	6,079 93
River Parkway, Section E.		
Construction account	452 27	
Land account	60,085 00	
		60,537 27
River Parkway, Section F.		
Construction account	5,727 12	5,727 12
River Parkway, Section H.		
Construction account	821 79	821 79
Cambridge Field.		
Construction account	2,281 55	2,281 55
Hastings Square.		
Construction account	1,739 46	1,739 46

Nursery.		
Construction account	$987 78	$987 78
East Cambridge Embankment.		
Construction account	739 62	739 62
Rindge Field.		
Construction account	47 25	47 25
Porter Square.		
Construction account	10 50	10 50
General Account.		
Construction account	3,615 61	3,615 61
Office Expenses.		
Construction account	972 78	972 78
Total amount expended		$136,270 29
Balance unexpended		6,322 89

During the year bills payable from Park Maintenance have been approved by the Board and certified to the Auditor to the total amount of $23,745.44, as follows :—

Shade trees	$5,026 87	
River Parkway, Section G	3,713 16	
Cambridge Field	3,635 92	
Commons and squares	3,452 44	
The Shelter	2,474 48	
Bath houses, Section D	2,370 32	
Public grounds	2,053 38	
General account	736 06	
Rindge Field	282 81	
Total amount expended		$23,745 44
Balance unexpended		$8 41

From the above it will be seen that the amount expended during the year under Park Loans was divided as follows:—

Construction account	$74,341 54
Land account	61,928 75
Total	$136,270 29

A detailed classification of the expenditures will be found in the report of the General Superintendent.

Since the beginning of the work in 1893 there has been expended to date, of money raised under Park and Esplanade Loans, the sum of $1,299,368.44.

The division is as follows:—

River Parkway, Section A.		
Construction account	$154,815 05	
Land account	1,901 83	
		$156,716 88
River Parkway, Section B.		
Construction account	85,167 25	85,167 25

River Parkway, Section C.		
Construction account	$49,300 55	
Land account	8,345 64	
		$57,646 19
River Parkway, Section D.		
Construction account	85,477 86	
Land account	95,047 25	
		180,525 11
River Parkway, Section E.		
Construction account	471 02	
Land account	60,110 00	
		60,581 02
River Parkway, Section F.		
Construction account	28,056 45	
Land account	66,432 36	
		94,488 81
River Parkway, Section G.		
Construction account	120,528 21	
Land account	85,614 82	
		206,143 03
River Parkway, Section H.		
Construction account	12,248 28	12,248 28
Cambridge Field.		
Construction account	126,699 20	
Land account	78,884 85	
		205,584 05
East Cambridge Embankment.		
Construction account	87,494 96	
Land account	45,231 40	
		132,726 36
Rindge Field.		
Construction account	8,861 19	
Land account	31,461 85	
		40,323 04
General Account.		
Construction account	38,237 87	38,237 87
Office Expenses.		
Construction account	11,681 68	11,681 68
Broadway Park.		
Construction account	11,308 65	11,308 65
Nursery.		
Construction account	5,457 80	5,457 80
Hastings Square.		
Construction account	2,683 07	2,683 07
Winthrop Square.		
Construction account	1,866 26	1,866 26
Washington Elm.		
Construction account	466 98	466 98
Porter Square.		
Construction account	10 50	10 50
		$1,303,862 83
Less Park revenue for 1894 and 1896 merged into land and construction accounts		4,494 39
		$1,299,368 44

Of the whole amount of Park Loans expended to December 1, 1901, 36 per cent. has been for land and 64 per cent. for construction, as follows :—

Land account (less "revenues")	$468,535 61
Construction account	830,832 83
	$1,299,368 44

Respectfully submitted,

GEO. HOWLAND COX,
WILLIAM M. RICHARDSON,
EDMUND REARDON,
} *Park Commissioners.*

REPORT OF THE GENERAL SUPERINTENDENT OF PARKS

CAMBRIDGE, December 2, 1901.

To the Board of Park Commissioners of the City of Cambridge:—

GENTLEMEN:—I have the honor to present my fifth annual report as General Superintendent of Parks, covering the financial year 1901.

RIVER PARKWAY.

SECTION A.

The maple trees planted in 1900 on either side of both roadways at Section A have made considerable growth this year necessitating their retying and restaking.

SECTION B.

This section has been kept in excellent condition and well lighted throughout the year, the expense being charged to the Construction Account. The shrubbery beds have been filled out and the trees retied and restaked.

A portion of either roadway has been treated with a clayey gravel which was thoroughly mixed with the river gravel, of which the roadways were constructed, in order to obtain a binding and more permanent surface.

SECTION C.

During the months of December, 1900, and January, 1901, a portion of the park road westerly from Section B was constructed of ashes purchased at twenty-eight cents per cubic yard; 4,534 cubic yards were received costing $1,269.51.

In December, 1900, a contract was awarded to Joseph Ross, of Boston, for the construction of a pile and timber bulkhead 2,278 feet in length, to be built along the river side of Section C, in order to allow of the filling of the section by hydraulic dredging of material from the bed of Charles River. The contract was completed in April, 1901, at a cost of $10,222.88 or $4.46 per lineal foot. A spillway was also constructed at an additional cost of $63.00.

In April, 1901, a contract was awarded to the New England Dredging Company of Boston for the filling of Section C in conjunction with the filling of private lands adjacent to Section C with material to be pumped

from the bed of the river. This contract was completed in October at a cost of $22,980.53. This cost is based on a price of ten cents per square foot of flats filled to grade 19 and six cents per square foot of marsh or upland filled to grade 19.

In April a contract was awarded to the New England Dredging Company for the filling of an inner earthen bulkhead in connection with the filling of adjoining lands. The cost of this bulkhead was $5,534.60.

Owing to the depth and instability of the mud underlying Section C and after the work of filling in had progressed to a considerable extent, the timber bulkhead moved out of line and grade in numerous places so that it was necessary to reinforce it. This was accomplished by driving extra piles along the outer face of the bulkhead and by dumping considerable material at the outside foot of the bulkhead. Wooden fences or fenders were also constructed on the land being filled in order to keep the filling away from the bulkhead. The cost of this extra work was $4,810.30.

In the completion of these contracts with the New England Dredging Company and the contracts between the New England Dredging Company and private owners, 1,116,920 square feet or 25.6 acres of available and marketable land has been made from useless and unsightly flats and marshes.

SECTION D.

During the months of February, March, April and May, 3,396 cubic yards of filling and ashes were received at Section D and used in carrying the park road westerly from Magazine Street. This material cost $510.26 or fifteen cents per cubic yard.

The chief construction work at Section D this year was the preparation of the tree and grass spaces at the top and bottom of the slopes surrounding the children's playground at the northwest corner of Magazine Street and Charles River Road. American lindens were planted on top of the slope and laurel willows at the bottom.

This playground contains about 20,000 square feet and is intended entirely for little children. The proposed construction provides sand courts, a wading basin and a large grass playfield. I think it would be advisable to complete this construction next year as its completion would undoubtedly keep a great many of the smaller children away from the bathing beach.

Owing to the large attendance at the bathing beach during the last week in June and to the limited bath house accommodations, it was found necessary to construct a men's locker house. In July a contract was awarded to David F. Burns of Cambridge for the erection of a locker

house 40x25 feet with an adjoining laundry shed 25x24 feet. The locker house contains 156 lockers 14x14 inches x 3 feet 7 inches, two zinc lined shower baths and large suit closet with attendant's counter attached. The laundry shed provides ample room for a washing machine, a centrifugal drying machine and a motor to run the same. These machines have not been installed. During the first of the bathing season the suits and towels were laundered by a local laundry at a cost of thirty cents per dozen for the suits and one cent each for the towels. After the completion of the laundry shed the suits were washed by hand by City employees, but on account of having no facilities for heating water the towels were sent to the laundry.

It would be advisable to establish a small laundering plant before next bathing season so that the suits and towels might be used several times in the same day.

The dredging of material from the bed of the river in the filling of Section C, kept the water in a very muddy condition during the bathing season and a great deal of mud was deposited on the beach. This made the bathing disagreeable at low tide, so it was decided to establish bathing hours, keeping the house open from nine o'clock in the morning to ten o'clock at night except one hour and a half before and after low tide. A schedule of bathing hours, giving also the time of high tide, was published and distributed. This system of bathing hours seemed to give as perfect satisfaction as was possible with a beach affected by the rise and fall of the tide.

A flag-staff was erected on the Old Magazine Building and a flag was flown during bathing hours.

Two life guards and a police officer were constantly on duty on the beach during bathing hours. Unfortunately one drowning accident occurred, but this was undoubtedly not due to any carelessness or negligence on the part of any of the City employees.

A new bathing float was constructed and a new life boat purchased.

It was estimated that 46,817 bathers used the beach between June 15th and September 15th. The total receipts from suits, towels and lockers amounted to $1,703.85.

Charles River Road between Magazine and Brookline Streets should be resurfaced as early next spring as possible. This road was constructed of a heavy gravel and was never surfaced with any more substantial material. There has been an immense amount of driving over this stretch of roadway since its completion and it is probable that such traffic will increase rather than decrease. The road should be surfaced with six inches of macadam, and the drainage system established. At the same time, it would be advisable to finish the construction of the planting strips

on either side of the roadway. The total cost of this work would probably be between $7,000 and $8,000.

Nine and a half dozen bathing suits and twenty dozen towels were purchased during the season, making the total equipment on hand six hundred eighty-three suits and seven hundred five towels. It is probable that this equipment will be sufficient until new bathing house facilities are constructed, especially if the laundering is done at the beach.

Pleasant Street was extended, in 1900, to Charles River Road and this year was built with City ashes.

SECTION E.

The taking of Section E, which lies between River Street and Western Avenue, was approved March 22, 1901, making the Park Reservation continuous from West Boston Bridge to Gerry's Landing.

SECTION F.

In May a contract was awarded to William N. Elston for tearing down and removing the two wooden boat houses at the foot of Flagg Street, which were formerly occupied by the Harvard University crews, and about 230 feet of the coal shed occupied by the firm of Richardson & Bacon. The contractor retained the material from the buildings and paid the City $237.

During the summer months the section from Flagg Street to Holyoke Street was cleaned up, the piles of dirt levelled and the holes filled.

About 3,600 cubic yards of filling at ten cents per cubic yard were received and used in the deep fill just west of Western Avenue.

In October a contract was awarded to Augustus Bellevue & Co., of Boston, for tearing down and removing about 1,000 lineal feet of stone wall comprising the sea walls at Richardson & Bacon's, Stickney's and Sargent's Wharves. The stone was to be delivered part at the end of the sea wall on the Esplanade west of Harvard Bridge and the remainder outside of the wooden bulkhead at Section C. The contract price for this work was fifty cents per ton. About two-thirds of the work contemplated by the contract has been completed and the time of completion extended to May 1, 1902.

In this contract the City excavated back of the walls exposing the stones.

The cutting away of the three wharves, Richardson & Bacon's, Stickney's and Sargent's, to the slope of the proposed beach necessitated a maximum cut of fifteen feet. This material was used in filling on top of

the wharves and in the canals between the wharves. In Richardson & Bacon's wharf the excavating was very difficult and costly on account of numerous planks, piles and portions of stone walls found buried in the wharf. The wharf was honeycombed with large piles about fourteen or fifteen inches square which were tied and braced in every direction. A second sea wall with wing walls all heavily ballasted was discovered about ten feet in from the face of wharf. Outside of the wharf there were numerous piles firmly bolted and tied together. Most of these have been pulled up and removed to Section C for use in the foundation for the future sea wall.

The canal west of Richardson & Bacon's has been partially filled with City ashes.

SECTION G.

The usual care of the roads, walks, grass, shrubbery and trees has required the almost constant employment of four men.

On account of the breaking of several large limbs from the Lowell willows, considerable extra work was necessary to put the trees in good condition.

SECTION H.

The work at this section has consisted in grading, sodding and seeding the loam spaces, grading the walk and beach, planting trees and putting in the watering system, completing the work commenced last year.

A contract for the erection of a six foot iron fence along the northern boundary of Section H has been awarded to The Van Dorn Iron Works Co. for the sum of $772.85 or $1.45 per lineal foot. This contract has not been completed.

HASTINGS SQUARE.

The remodelling of Hastings Square was commenced in May and completed in July. This work involved the removal of the old stone post fence which surrounded the Square, throwing the sidewalks into the Square, the removal of about twenty trees, the relocation of the walks, the setting of about 578 feet of edgestone, and the construction of grass and shrubbery spaces.

By an order of the City Council approved May 15, the sidewalks abutting on Hastings Square were placed under the care and control of the Park Commissioners.

CAMBRIDGE FIELD.

The construction of a third of a mile cinder track on the playfield was commenced in April, but, owing to the teamster's strike the work was greatly delayed and not finished until September. It was found impossible to get cinders at a reasonable price during the strike, so the work was delayed until better prices prevailed.

This construction necessitated considerable regrading of the playfield and surrounding paths. It will be necessary to put a surfacing of macadam on the paths where they enter the playfield, to harmonize with the main walks.

About 28,000 people enjoyed the skating during the skating season of twenty-three days.

PORTER SQUARE.

The plan of the proposed improvement at Porter Square contemplates the enclosing of about an acre of the Square with curbing, laying out the same in grass, shrubbery, trees, and a walk, relocating the drinking fountain, flag staff, and weigh scales.

The completion of this construction will add greatly to the appearance of Porter Square as at present it is a very unsightly spot.

PUBLIC GROUNDS.

The shrubbery beds at the English High school and Latin school grounds required considerable filling out with new shrubs this year.

The sub-grading for the remodelling of the Russell school yard was accomplished during the months of December and January. In May, 230 cubic yards of loam were placed in the grass spaces and grass seed planted. The walks were constructed and surfaced with gravel.

Very little work will be required to complete this construction on the Larch Street side of the school.

The construction of the grounds of the Wellington and Felton schools which was begun last year was completed early this year.

There is a great deal of work to be done on the schoolhouse grounds which is recognized as almost imperative, but until a special appropriation is made for such work, very little can be accomplished.

The remodelling of the Public Library grounds was commenced and about half completed in 1897, but owing to the lack of appropriations nothing towards its completion has been done since.

EAST CAMBRIDGE EMBANKMENT.

One thousand four hundred forty-eight double loads of filling were received at the East Cambridge Embankment, and were used in filling up the two large holes in which stagnant water had accumulated. This material was delivered free of cost.

Men were employed during August and September levelling a portion of the Embankment to subgrade.

SHADE TREES.

Owing to the prevalence of several tree and shrub destroying pests known as the Gypsy Moth, the Brown Tail Moth and the Elm-leaf Beetle, it was necessary to do considerable extra work on the shade trees this year in the extermination of these pests. During the month of February a large force of men was employed cutting the nests of the Brown Tail Moth from the trees. These nests contained on an average between two and three hundred caterpillars. Circulars were issued requesting property owners to clean their trees of the nests, and in many cases excellent work was done by individuals. There were quite a number of persons, however, who did nothing whatever towards the extermination of the pest, so the work of the City was of little or no avail. The result of this lack of co-operation between the City and private owners, was that the City was overrun with caterpillars during the Spring and early Summer months and later with the moths. In many instances persons were seriously afflicted with a kind of rash or poisonous eruption caused undoubtedly by the small hairs which the caterpillars shed.

The Maintenance Appropriations the last few years have not been sufficient to enable the department to undertake a systematic treatment of our street trees. The men whom it has been possible to employ have not been able to do even enough to satisfy the requests of individuals for trimming, removing, new guards, repairing guards, etc. Some of our trees are in a dangerous condition, owing to the dead branches in them but with the usual available appropriation either these trees must be neglected or the requests of individual citizens must be denied.

The work on the street trees accomplished this year is as follows: —

2,684 Wire guards repaired.
1,093 Trees trimmed.
490 New wire guards put on.
164 Trees restaked.

101 Trees removed (dead, dying, unsafe, or by petition, including several the heads of which had been removed last year) as follows: —

Ulmus Americana	49
Æsculus hippocastanum	19
Acer saccharum	11
Acer platanoides	4
Fraxinus Americana	4
Acer dasycarpum	3
Acer rubrum	3
Tilia Europæa	3
Populus candicans	1
Quercus rubra	1
Salix alba	1
Tilia Americana	1
Ulmus campestris	1
	101

42 Heads of trees removed (work of removing not completed).

319 Trees planted (including replacing of dead trees) as follows: —

Acer saccharum	186
Ulmus Americana	72
Fraxinus Americana	38
Populus bolleana	23
	319

Petitions for the removal of thirty-two trees have been received by the Board by which twenty-three trees have been removed.

During the Winter months the settees from the different sections were thoroughly cleaned, repaired and painted.

The work of the department would be greatly facilitated by the securing of a suitable stable and yard, where the tools and implements could be stored and where all repair work could be done. With the present accommodations it is impossible to concentrate the repair work of the department to any advantage.

THE YEAR'S EXPENDITURES.

The expenses of the department for the year are shown in the following summary of the departmental accounts :—

PARK LOANS.

(Lands and Construction.)

Amount of unused balance of 1900 appropriation reappropriated December 6, 1900			$42,593 18
Amount appropriated March 30, 1901			100,000 00
			$142,593 18
EXPENDED.			
River Parkway, Section A.			
Lighting	$420 84		
Pay roll	53 00		
		$473 84	
River Parkway, Section B.			
Pay roll	$2,368 01		
Lighting	1,209 09		
Shrubs	130 31		
Teaming	76 31		
Engineering	60 15		
Iron fence on sea wall	40 30		
Tree poles	26 00		
Hard-wood ashes	19 84		
Cost of law suit	11 72		
Hose for tying trees	6 00		
Staples for tying trees	2 60		
Repairing garden hydrant	2 50		
Filling	2 00		
		$3,954 83	
River Parkway, Section C.			
Filling flats and marshes	$22,980 53		
Wooden bulkhead	10,222 88		
Filling inner earthen bulkhead	5,534 60		
Reinforcing bulkhead	4,810 30		
Ashes	1,269 51		
Engineering	1,050 66		
Witness fees in case Norcross *vs.* City	1,025 00		
Commissioners fees in case Norcross *vs.* City	813 75		
Pay roll	524 75		
Printing and advertising	13 41		
Lumber	12 09		
Settlement floats	9 25		
Examination of titles	5 00		
Stove pipe	4 70		
Hardware	2 28		
Teaming	2 25		
		$48,280 96	
River Parkway, Section D.			
Pay roll	$2,862 84		
Building men's locker house	1,175 58		
Amounts carried forward	$4,038 42	$52,709 63	$142,593 18

Amounts brought forward	$4,038 42	$52,709 63	$142,593 18
Lighting	687 97		
Loam	312 01		
Filling	282 21		
Ashes	228 05		
Drainage system	202 67		
Engineering	145 24		
Stakes for engineers	68 25		
Shrubs	47 88		
Wooden seats	27 00		
Teaming	15 38		
Back stop	8 63		
Trees	7 00		
Miscellaneous supplies	3 78		
Signs	3 00		
Coal	1 44		
Turning water off and on	1 00		
		$6,079 93	
River Parkway, Section E.			
Lands	$60,000 00		
Engineering	412 74		
Examination of titles	85 00		
Pay roll	37 38		
Blacksmithing	2 15		
		$60,537 27	
River Parkway, Section F.			
Pay roll	$3,364 13		
Removing stone walls	815 63		
Teaming	695 06		
Filling	407 56		
Engineering	320 63		
Lighting	62 28		
Lumber	27 38		
Tools and hardware	16 61		
Advertising and printing	12 12		
Blowing piles	3 72		
Serving notices	1 00		
Water rent	1 00		
		$5,727 12	
River Parkway, Section H.			
Pay roll	$514 99		
Watering system	104 40		
Engineering	54 75		
Loam	51 75		
Sod	48 75		
Trees	40 00		
Advertising	4 15		
Teaming	3 00		
		$821 79	
Cambridge Field.			
Pay roll	$1,226 67		
Cinders	548 06		
Teaming	228 18		
Engineering	157 49		
Amounts carried forward	$2,160 40	$125,875 74	$142,593 18

Amounts brought forward	$2,160 40	$125,875 74	$142,593 18
Lumber	78 79		
Stakes for engineers	29 05		
Blacksmithing	9 21		
Hardware	3 00		
Printing and advertising	1 10		
		$2,281 55	
Hastings Square.			
Pay roll	$903 51		
Edgestone	271 90		
Teaming	130 69		
Shrubs	125 70		
Removing fence	99 00		
Engineering	96 69		
Sod	56 25		
Loam	21 50		
Watering system	15 70		
Drainage system	12 26		
Filling	3 28		
Hardware	1 60		
Printing and advertising	1 38		
		$1,739 46	
Nursery.			
Pay roll	$717 33		
Trees	257 96		
Tarred paper	4 45		
Coal	2 88		
Hardware	2 07		
Lumber	1 84		
Tree labels	1 25		
		$987 78	
East Cambridge Embankment.			
Pay roll	$736 25		
Engineering	3 37		
		$739 62	
Rindge Field.			
Pay roll	$39 17		
Lumber	4 28		
Teaming	3 00		
Hardware	80		
		$47 25	
Porter Square.			
Engineering	$10 50		
		$10 50	
General Account.			
General Superintendent's salary	$2,000 00		
Landscape Architect's fees	401 47		
Board of horse, carriage hire, etc.	310 70		
Car tickets for engineers	175 00		
Heliotype cuts for report of 1900	131 25		
Rent of store room	130 00		
Car tickets for office	100 00		
Grass seed	65 60		
Tools and hardware	64 52		
Amounts carried forward	$3,378 54	$131,681 90	$142,593 18

Amounts brought forward	$3,378 54	$131,681 90	$142,593 18
Printing and binding reports of 1900	64 45		
Entertaining Finance and Park Committees of City Council	35 80		
Rubber boots	32 60		
Photographs and photographic materials	29 57		
Shoeing horse	27 00		
Carriage repairs	22 50		
Traverse book for engineers	7 75		
Bicycle repairs	6 50		
Express	4 95		
Envelopes for reports	4 20		
Printing and advertising	1 75		
		$3,615 61	
Office Expenses.			
Pay roll	$647 50		
Telephone service	112 10		
Stationery	59 73		
Printing and advertising	53 00		
Postage stamps	39 50		
"Pay roll" and "Tree Order" books	27 00		
Card index base	21 00		
Tree books and cyclopædias	8 00		
Directory	3 00		
Express	90		
Typewriter supplies	53		
Telegrams	52		
		$972 78	
Total			$136,270 29
Balance unexpended			$6,322 89

PARK MAINTENANCE.

Amount appropriated March 30, 1901	$21,500 00
Amount appropriated June 19, 1901	600 00
Amount appropriated Oct. 31, 1901	1,450 00
Revenue from bath houses (above $1,500)	203 85
	$23,753 85

Shade Trees.			
Pay roll	$3,496 69		
Removing Brown Tail Moth nests	665 69		
Teaming	225 69		
Wire and wire netting	222 50		
Loam	169 86		
Tree poles	107 28		
Engineering	40 25		
Tools and hardware	38 09		
Sharpening saws	23 10		
Special tree guards	23 10		
Hose for tying trees	5 92		
Extension ladders	4 45		
Repairing damage done by trees	3 25		
Express	1 00		
		$5,026 87	
Amounts carried forward		$5,026 87	$23,753 85

Amounts brought forward		$5,026 87	$23,753 85
River Parkway, Section G.			
Pay roll	$2,650 64		
Lighting	845 34		
Engineering	116 38		
Wood ashes	19 42		
Repairing settees	16 60		
Teaming	14 90		
Loam	10 58		
Lumber for board walk	8 40		
Repairing iron fence	6 50		
Shrubs	6 27		
Blacksmithing	6 25		
Tools and hardware	4 55		
Repairing roller	3 15		
Repairing watering system	3 08		
Freight on shrubs	1 10		
		$3,713 16	
Cambridge Field.			
Pay roll	$2,388 34		
Lighting	1,074 99		
Cap and suits for Superintendent	39 96		
Wood ashes	36 61		
Basket-ball goals	27 94		
Teaming	16 69		
Repairing settees	16 55		
Repairing drinking fountain	10 05		
Engineering	8 75		
Blacksmithing	6 60		
Shrubs	5 56		
Tools and hardware	2 28		
Lumber	1 20		
Express	40		
		$3,635 92	
Commons and Squares.			
Pay roll	$2,546 00		
Lighting	420 00		
Teaming	135 13		
Bulbs	107 10		
Repairing settees	96 42		
Work on flag staffs	52 77		
Lumber for walks	20 93		
Bunting and repairing flags	13 10		
Tools and hardware	12 61		
Insurance on settees	10 00		
Axle for cannon truck	9 00		
Repairing rubbish barrels	8 99		
Coal	6 80		
Express	4 60		
Repairs to watering system, etc.	2 88		
Repairing wheelbarrows	2 11		
Engineering	2 00		
Manure	2 00		
		$3,452 44	
Amounts carried forward		$15,828 39	$23,753 85

Amounts brought forward		$15,828 39	$23,753 85
The Shelter.			
Pay roll	$1,875 99		
Repairing and painting outside woodwork	290 00		
Coal	102 25		
Telephone service	62 85		
Lighting	62 12		
Cap and suit for Janitor	27 17		
Toilet paper	25 50		
Laundering towels	15 45		
Miscellaneous supplies	11 10		
Express	2 05		
		$2,474 48	
Bath Houses, Section D.			
Pay roll	$1,497 31		
Laundering suits and towels	302 05		
Lighting	143 83		
Bathing suits	97 50		
Tape, buttons, etc.	59 75		
Boat	46 69		
New float	40 62		
Towels	33 50		
Canvas cover for raft	23 50		
Printing	22 50		
Rope for life lines	21 59		
Cash registers	21 40		
Flag pole	17 50		
Tools and hardware	11 63		
Running wires for telephone	9 40		
Telephone service	7 70		
Buoys for life line	4 50		
Blacksmithing	4 25		
Chain for floats	2 35		
Mirror	2 00		
Chair	75		
		$2,370 32	
Public Grounds.			
Pay roll	$1,545 39		
Loam	172 94		
Engineering	89 99		
Herbaceous plants	70 00		
Shrubs	68 80		
Gravel	20 87		
Lumber for walks	20 77		
Sod	18 75		
Bulbs	17 65		
Teaming	13 50		
Ashes	7 87		
Manure	6 50		
Express	35		
		$2,053 38	
General Account.			
Board of horse and use of room	$260 00		
Tools and hardware	149 37		
Amounts carried forward	$409 37	$22,726 57	$23,753 85

Amounts brought forward	$409 37	$22,726 57	$23,753 85
Fence posts	73 33		
Harness and harness repairs . . .	55 85		
Garden hose	53 00		
Repairing wagon	32 75		
Cleaning ice at Artificial Pond . . .	25 00		
Repairing bicycles	22 35		
Stove	16 54		
Shoeing horse	11 20		
Park "Rules and Regulations" . .	11 00		
Lubricating oil	8 50		
Repairing lawn mowers	7 87		
Express	7 55		
Repairing revolver	1 75		
		$736 06	
Rindge Field.			
Lighting	$273 79		
Repairing settees	9 02		
		$282 81	
Total			$23,745 44
Balance unexpended			$8 41

Respectfully submitted,

H. E. WHITING.
General Superintendent of Parks.

REPORT OF THE LANDSCAPE ARCHITECTS

Brookline Mass., December 5, 1901.

Mr. George Howland Cox, Chairman Cambridge Park Commission, City Hall, Cambridge :—

Dear Sir :—We beg to submit below our usual report of our doings in connection with questions of landscape design for your Commission during the year ending November 30, 1901.

During the above period we have had conferences with members of your Board and with your Superintendent and Engineer. We have visited occasionally the various works in progress, and have prepared twenty-eight sketches, plans, diagrams and tracings, mainly for portions of Charles River Road and for Hastings Square and Porter Square.

Charles River Road.

The work of constructing the new Cambridge Bridge across the Charles River at the Main Street end of the Esplanade having been begun during the year, and the plans for the bridge having rendered impracticable the execution of our previously designed arrangements for the termination of the Esplanade at Main Street, we have, at your request, prepared a revised plan for this terminus. This plan has been informally approved by the Cambridge Bridge Commission and by their Engineer and Architects. The principal features of this plan are :—

First, the two drives of the Esplanade are made to terminate in a macadamized circle one hundred and fifty feet in diameter at the northeast end of the level straight part of the Esplanade.

Second, an outlet to Main Street is provided by means of a short, straight roadway fifty-five feet wide at right angles with Main Street and with its centre line intersecting the centre of the circle and having walks fifteen feet wide on both sides.

Third, between the circle and the new incline in Main Street leading up to the bridge there is a grass plot with a grove of trees upon it. In the centre of this plot adjoining the circle there is an open grass plot with walks on each side of it uniting by a semi-circular curve at the northeast end. This plot will be a fine site for a sculptured fountain or for a monument. From this point a straight walk is carried on the same axis line

as the ornamental central planting plot of the Esplanade up an incline to Main Street. When the grove of trees shall have attained sufficient size they will unite to form a single mass of foliage which will form the terminus of the view looking northeastward along the Esplanade and will form a desirable background to the future monument. By means of the grove of trees the otherwise awkward diagonal intersection and rising grade of Main Street with its supporting embankment will be masked and thrown into the background. The promenade, extending along the whole length of the sea wall of the Esplanade, is carried level past the circle to the foot of a broad flight of steps which will lead up to a terrace at the abutment of the bridge. It is proposed to erect on this terrace an octagonal tourelle which will form a picturesque objective point in the view looking northeast along the promenade. This tourelle is one of a pair, the other being in a corresponding position on the other end of the bridge abutment. A somewhat similar arrangement of walks, steps and terraces and planting is proposed for the triangular space on the north side of Main Street between the river wall and a proposed diagonal street from Main Street to the bridge carrying First Street over the canal. In this case, however, as a matter of convenience, a roadway on a line with First Street is carried up from the canal bridge to Main Street near the bridge abutment.

We have advised with the Commission with regard to the "taking" line in Section E between River Street and Western Avenue.

We have prepared construction drawings for the various features appearing upon the surface of the portion of Section F of the Charles River Road extending from the completed portion east of Boylston Street to Flagg Street. Where some narrow pieces of land north of the regular outline of the Parkway have been secured it is proposed to put in some ornamental planting. The gravel beach treatment already executed to a point east of the Weld Boat House is to be continued to Flagg Street, east of which point a different treatment will be necessary, owing to the gradual narrowing of the available space between the promenade and the Harbor Commissioners' line. It is proposed to have a strip of turf and ornamental shrubbery between the promenade and the upper line of the gravel beach. This planting will be interrupted at intervals by cross walks affording access to the beach. The removal of Richardson & Bacon's coal wharf and huge coal sheds which have heretofore obstructed the view down the line of the Parkway from Boylston Street, makes it comparatively easy to imagine what a great improvement will be effected in this portion of Cambridge by the completion of the Charles River Road. Already sufficient grading has been done to enable one to walk along the line of the Parkway from Boylston Street to Stiles Street, about eight hundred feet west of Western Avenue.

Hastings Square.

At the request of the Commission we have prepared a revised plan for walks and planting for this Square. Our instructions were that the fence on all four sides of the Square was to be removed, that the sidewalks were to be moved back several feet from the street curbing, that there was to be a border of shrubbery between the sidewalk and the street curbing, that the walks were to be laid out twelve feet wide but that for some years a cement concrete strip four feet wide in the middle was as much cement paving as could be afforded, that as few of the existing trees as possible were to be destroyed, that short-cutting was to be completely provided for, that no architectural features were desired, and that the expenses of improvement were to be kept as low as practicable. It was at first thought that if the sidewalks were four feet from the curb there would be sufficient space for a border of shrubbery but it was found that a larger number of existing trees could be saved by having the sidewalks about fifteen feet in from the street curbing, and this increased space has afforded opportunity for a much handsomer shrubbery border. There are wide entrances at each of the four corners, and diagonal curving walks near the centre of the Square provide adequately for a large amount of short-cutting. However designed these diagonal cross-walks would have resulted in breaking the interior planting ground of the Square into four pieces. The peculiar arrangement actually adopted was designed to accommodate the four elm trees forming the central feature of the Square. In proportion to the size of the Square the walks may perhaps appear to be unduly wide. They were designed so partly to provide for the cement concrete paving four feet wide along the centre of all walks, and because it was thought that the appearance of the strips of hard gravel surface would be better if they were made at least four feet wide. Another reason for wide walks in a square in the midst of a dense population is that it is found in practice that if the walks are not wide the turf edges are much more apt to be trodden out. Still another reason for wide walks is to provide space for numerous benches where people may sit, especially during hot weather. In some of the principal squares in New York the walks are now bordered almost continuously by rows of benches which at times are fully occupied. This crowded condition is not likely to arise for some time in that part of Cambridge but must be anticipated in designing the permanent improvement of such a square. The most marked characteristic of the new design for this Square is the massive border of shrubbery surrounding it which will afford, for so small a pleasure ground, an uncommon degree of seclusion to those sitting upon the benches or walking through the Square.

Cambridge Field.

We have prepared a sketch for a cinder running track, three laps to the mile, following the edge of the hard gravel playground.

Porter Square.

We have prepared, at the request of the Commission, a preliminary plan for an ornamental treatment of the triangular space at the intersection of Somerville Avenue with Massachusetts Avenue which has long been known as Porter Square. In this plan the idea is to restrict the traffic on Somerville Avenue to the space occupied by the car tracks and to the northward of them, to provide a narrow roadway adjoining the sidewalk at the east end of the triangular space, to provide a roadway north of the car tracks in Massachusetts Avenue having the same width as the roadway of the bridge over the railroad, and to enclose the triangular space remaining by curbing and utilize it (except where walks are necessary) for lawn, tree planting, and along the Somerville Avenue side, for masses of ornamental shrubbery. The cross driveway at the east end of the triangle is broadened out at its south end sufficiently to afford space for a horse drinking fountain. This fountain may be semi-circular and built against a stone slab or small piece of wall on the shady side of which there might be a drinking fountain for pedestrians. By slightly altering the present line of curbing of the sidewalk at the east side of the triangle a narrow space is provided which can be utilized for shrubbery and vines to grow on the fence needed as a guard-rail on the high retaining wall along the railroad cut. It is proposed to replace the present ugly, high board fence by an open iron railing fence and to cover the great retaining wall with foliage by planting vines at the base. The railroad platform below this wall is neatly asphalted but it is quite unnecessarily broad. We have suggested that a portion of the asphalt be taken up at the base of the wall and a plantation of trees and shrubbery substituted for it. When the trees have attained mature size they will afford a most welcome shade and relief to the eyes of persons on the railroad platform as well as on the sidewalk above the wall. It is proposed to move the flag-staff which now forms the principal feature of the Square, to the west point of the triangle where it will fit in properly with the design. The existing weighing scales can be moved sufficiently to fit the proposed curbing along the north side of the roadway of Massachusetts Avenue. The proposed improvements while they will undoubtedly involve considerable expense in proportion to the area, are adapted to make an interesting and beautiful spot of what is now a hideous area of useless macadam.

Respectfully submitted,

OLMSTED BROTHERS.

REPORT OF THE CITY ENGINEER

OFFICE OF THE CITY ENGINEER,
December 2, 1901.

Geo. H. Cox, Esq., President Cambridge Park Commission :—

There have been employed on the work connected with the Park Department three assistants, two of them during the entire year.

But little work of an engineering character has been done on the lower sections of the River Parkway; about 120 feet of curb have been set at the corners of Greenhalge Street with the Esplanade in Section B.

In Section C, the most important work has been the filling of the Parkway from near the end of the present sea wall opposite the proposed extension of Erie Street to the Boston & Albany Branch Railroad, and in connection therewith the filling of the flats and marshes in the rear owned by various private owners. As it is proposed to extend the present sea wall but a short distance beyond its present terminus and to continue the Parkway with a beach construction of gravel, it became necessary to construct a temporary bulkhead along this part of the way, as it was proposed to do the filling by means of an hydraulic dredge. A contract was made with Mr. Joseph Ross of Boston, for the construction of the bulkhead. Two thousand two hundred seventy-eight lineal feet of bulkhead were built. The total cost of the bulkhead with extra work and piling was $12,996.71. As the bulkhead is located in the place to be occupied by the beach, when this is constructed the upper part of the bulkhead will be cut away and the beach built in front of and over the remaining portion.

The Parkway here being but a narrow strip between the bulkhead as built and the rear line of the Park land, and the adjoining land being low, it was necessary to either build another bulkhead on the rear line or fill the lands of private owners to a large extent.

An arrangement was finally made with the owners of said lands by which the City was to pay an amount equal to the estimated cost of a

bulkhead and dyke on the rear line toward the cost of filling the private lands, the owners agreeing to fill the land at the same time and to the same grade as the City lands.

A contract was made with the New England Dredging Company to do all the filling and the contract was completed October 30, 1901.

Under this contract $18,812.30 have been paid for the filling of City lands and the sum of $5,534.60 has been paid the same company as the estimated cost of the rear bulkhead and dyke, toward the filling of the private lands.

By this a very great improvement has been accomplished; about 253,460 square feet of the City Park lands have been filled and also about 673,645 square feet of private ownership, consisting of marsh and flats, have been reclaimed and made ready for future development.

There now remains but the short section between the railroad and Brookline Street, about 400 feet in length, to be filled.

This Parkway now forms the front boundary of an immense tract, containing between Main Street, the Parkway, and the Railroad location, about 7,329,000 square feet, or 168 1-4 acres of land largely unoccupied at present, as shown by the accompanying plan of the territory, with the existing and suggested system of streets indicated upon it. It will be seen by inspection of the plan what an important part the Parkway forms of this system, and how large a part it must have in the development and sale of the lands.

The construction of the beach and roadway, the crossing of the railroad by a bridge, and the construction of the Parkway to connect with Brookline Street are absolutely necessary to complete this part of the work and make the portions already built of the most service.

In Section E, between River Street and Western Avenue, surveys, plans and descriptions were made for the taking of a strip of land about 75 feet wide and about 1,040 feet long, along the Harbor line, thus making the connection at this point between the parts of the Parkway already taken. Seventy-seven thousand one hundred ninety-three square feet of land were taken by action of the City Council approved March 22, 1901.

In Section F, from a point opposite the foot of Dunster Street easterly about 1,800 feet, a considerable amount of the beach and road construction work has been done.

The stone sea-walls of the three wharves long known as "Richardson and Bacon's Wharf" (formerly called the "College Wharf"), "Sargent's Wharf" and "Stickney's Wharf" have been largely removed under a contract made with Augustus Bellevue & Company. Such of this stone as is suitable is being placed so as to be used in the proposed extension of the sea-wall opposite Putnam Avenue, and the poorer grade of stone is

being placed in front of the bulkhead near the Boston & Albany Railroad where the beach is to be built.

Loam has been placed and trees set on about 600 feet of Parkway in the rear of the Cambridge Hospital grounds. At the Russell School on Larch Street, and at the new Washington School on Cambridge Street, plans were made and grades given for grading and loaming the grounds and yards.

At Hastings Square, lines and grades were set out for an entirely new arrangement of paths and shrubbery and surface grading.

At the Cambridge Field a running track of one-third of a mile in length was staked out and built during the first part of the season.

Very respectfully submitted

L. M. HASTINGS,
City Engineer.

REPORT OF THE CITY ENGINEER

OFFICE OF THE CITY ENGINEER,
CAMBRIDGE, December 2, 1901.

To the Honorable, the City Council:—

The undersigned herewith submits the thirty-fifth annual report of the City Engineer, showing the operation and expenditures of the departments of Engineering and Sewers for the year ending December 1, 1901.

OFFICE.

Nine assistants have been employed in the department during the year at various times, beside the clerk, and three assistants employed on work connected with the Park Department.

The yearly summary of work done is as follows: —

FOR STREET DEPARTMENT.

Number of surveys	15
Number of street lines given	155
Number of street grades given	100
Number of streets on which paving, curb, etc., was measured	130
Number of assessments prepared	290
Number of plans or profiles prepared	64

FOR SEWER DEPARTMENT.

Number of surveys	17
Number of lines given	50
Number of grades given	317
Number of sewers measured	29
Number of sewers assessed	24
Number of sewer assessments prepared	132
Number of plans or profiles prepared	33

FOR WATER WORKS.

Number of surveys	3
Number of lines given	8
Number of grades given	10
Number of plans or profiles made	12

FOR PARK DEPARTMENT.

Number of surveys made	54
Number of grades given	165
Number of stone bounds set	5
Number of plans or profiles made	4
Number of lines given	30

FOR PRIVATE PARTIES.

Number of street lines given	75
Number of street grades given	20

MISCELLANEOUS WORK.

Number of surveys	45
Number of surveys or levels made	120
Number of houses measured	350
Number of plans or profiles prepared	247

There are now on file in the office 7,628 plans.

FINANCIAL.

Appropriation	$10,800 00	
Expended	10,750 64	
Balance unexpended		$49 36
Assessors plans	$300 00	
Expended	300 00	
Balance unexpended		$0 00

ABOLITION OF GRADE CROSSINGS.

A large amount of time was devoted during the first part of the year to studies and investigation concerning the matter of the general abolition of grade crossings in the City.

Plans were prepared in considerable detail of each crossing, sometimes two or three schemes for abolishing the same crossing were studied and an estimate of the cost of each scheme made.

The total estimated cost of abolishing the several crossings, considered in the report, was $1,855,637.31.

A report was prepared covering quite fully the whole subject and was submitted to the City Council in print on March 5, 1901.

This report has received a wide distribution among the citizens of Cambridge and persons interested in the subject.

The Boston Elevated Railway Company has asked for a location for double tracks on Concord Avenue from Huron Avenue to the Belmont line. It has been proposed to widen the street to a width of sixty feet between these points, and the Board of Survey has approved the lines to that width, but the crossing at grade by the street railway track of the tracks of the Watertown Branch of the Fitchburg division has proved an obstacle to securing the approval of the State Board of Railroad Commissioners.

It would seem as though this crossing would be a good one with which to commence the work of separation of grade crossings in this City.

BOARD OF SURVEY.

The establishment of a Board of Survey in this city under an Act of the Legislature passed in 1900 has necessarily increased the work of this department. All of the plans required by the Board of Survey are prepared and kept on file here, as well as the plans of street layouts, widenings, new grades, etc., furnished by private parties.

Many hearings have been had and meetings attended during the year on matters connected with the work of the Board. The most important matter considered has been the proposed layout of streets in the section between Main Street, Massachusetts Avenue, the Parkway and the Boston & Albany Railroad.

A system of street locations for this territory was adopted by the Board of Survey on July 1st, 1901, and is shown upon the plan opposite the portion of this report relating to park work.

STREET CONDUIT LOCATION, PLANS.

An important work begun this year has been the preparation of plans of all the streets of the City, upon which shall be shown the location, size and depth of all conduits and similar structures below the surface, such as sewers, water pipes, gas pipes, electric lighting, telephone, telegraph, and street railway conduits, steam heating pipes, etc. In many of the streets these conduits have become so numerous and the location of them so uncertain that it becomes a difficult matter to find a suitable location for a new sewer or pipe when one becomes necessary. The whole City is to be cut up into sections, each section to be shown on one sheet, and as fast as information concerning any existing conduit is obtained, or a new one laid, a record is made on the proper plan.

A good beginning has already been made in the preparation of these plans.

STREETS.

Lines and grades have been established on sundry streets as shown by the following table :—

STREETS LAID OUT AND ACCEPTED DECEMBER 1, 1900, TO DECEMBER 1, 1901.

LOCATION OF STREET.						PLAN.	
Name.	From	To	Length in Feet.	Width in Feet.	Date of Acceptance.	Made by	Date.
Ash Street	Mt. Auburn Street	Southerly	310	30	Dec. 28, 1900	J. G. Chase	Oct. 13, 1886
*Belmont Street	Holworthy Street	Belmont Town Line	1,130	75	Dec. 24, 1900	City Engineer	June, 1898
Charles Street	First Street	Second Street	400	50	Dec. 28, 1900	City Engineer	Nov. 19, 1900
Clark Street	School Street	Washington Street	280	30	Jan. 3, 1901	City Engineer	Oct. 15, 1900
Dudley Street	Cedar Street	Montgomery Street	590	40	Dec. 28, 1900	City Engineer	Nov. 22, 1900
Gorham Street	Wendell Street	Hammond Street	335	40	July 3, 1901	W. A. Mason & Son	Mar. 15, 1901
Harris Street	Oxford Street	Somerville City Line	350	40	Dec. 28, 1900	W. A. Mason & Son	July 30, 1900
Holden Street	Scott Street	Farrar Street	412	40	Nov. 29, 1900	W. A. Mason & Son	Mar. 5, 1901
Magoun Street	Massachusetts Avenue.	Whittemore Street	677	40	July 3, 1901	D. E. Perkins	Sept. 7, 1900
Marcella Street	Berkshire Street.	Portland Street	300	40	July 3, 1901	E. F. Bowker	June 16, 1900
Sargent Street	Rindge Avenue	Railroad Street	841	30	Dec. 28, 1900	City Engineer	Dec., 1900
Spring Street	First Street	Second Street	400	50	Dec. 28, 1900	City Engineer	Nov. 5, 1900
Vine Street	First Street	Second Street	400	50	Dec. 28, 1900	City Engineer	Nov. 19, 1900

* Widening.

Total length of accepted streets, Dec. 1, 1900, 92.845 miles.

Total length of streets accepted from Dec. 1, 1900, to Dec. 1, 1901, 5295 feet or 1.003 miles.

Total length of accepted streets, Dec. 1, 1901, 93.848 miles.

BRIDGES.

The only bridges which seem to require special mention at this time are the two steel bridges over the Fitchburg Railroad, one at Walden Street and one at Huron Avenue.

Examination shows that the protective covering of lead put on in 1898 has been largely worn away and that deterioration is constantly taking place in important parts of the metal members.

To maintain the safety of these bridges they should at once be thoroughly cleaned from scale and rust, painted, and again covered with a protective covering to prevent further injury taking place.

SEWERS.

Seven thousand, five hundred eighteen and seven-tenths feet or 1.424 miles of sewers have been built by the City during the year, making the total mileage in the City 111.53 miles. These figures do not include the length of sewers constructed as a part of the Improved Sewerage System in streets which already contained sewers. Where sewers have been constructed in streets not already sewered such length has been included in the length given above.

The cost of the construction of sewers to date has been $1,368,621.89. To this may be added the amount expended for Improved Sewerage Construction to date $193,154.49, making the total amount expended to date for new sewer construction and Improved Sewerage $1,561,776.38.

All the sewers have been built by day labor by the Superintendent of Sewers, under the general direction of the City Engineer.

Thirty-three catch basins have been built at a cost of $2,187.63. Thirty-two catch basins have been repaired. Five thousand, eight hundred seventy-four loads of material were removed from 2,304 catch basins at a cost of $5,605.00 for this year.

METROPOLITAN SEWER.

The State tax for the year 1901, assessed to Cambridge on account of the Metropolitan Sewer, is as follows :—

Sinking Fund requirements	$11,944 34
Interest account	43,601 19
Maintenance and operation	16,799 40
Total tax	$72,344 93

The automatic registers have been continued in operation during the year; one on the regulator at the junction of Portland Street and Binney Street, and one on the regulator at Massachusetts Avenue at Alewife Brook, and one at the Binney Street tide-gate, and one at the Bath Street tide-gate.

A statement of the operation of these fixtures for 1899, 1900 and 1901 follows :—

STATEMENT SHOWING RESULTS OF SELF-RECORDING APPARATUS AT METROPOLITAN SEWER CONNECTIONS.

	Binney Street Regulator.		Massachusetts Ave. Regulator.		Binney Street Tide Gate.		Bath Street Tide Gate.	
Year.	Number of hours shut.	Per cent. of total time.	Number of hours shut.	Per cent. of total time.	Number of hours open.	Per cent. of total time.	Number of hours open.	Per cent. of total time.
To Dec. 1, 1899	606h. 45m.	6.93	.....	.....	248h. 0m.	2.83	569h. 0m.	6.50
1900	655h. 15m.	7.48	387h. 8m.	4.42	291h. 10m.	3.32	315h. 25m.	3.60
1901	394h. 40m.	4.51	587h. 30m.	6.74	217h. 20m.	2.48	209h. 0m.	2.39

The cost of care and maintenance of regulators and tide-gates in this City has been for the year 1901 $1,464.15.

A detailed statement of the cost of sewers constructed during the year is appended :—

SEWERS CONSTRUCTED BETWEEN DECEMBER 1, 1900, AND DECEMBER 1, 1901.

Location.			Construction.							Total Cost.
Street.	From	To	Material.	Size in inches.	Av. depth of Cut.	Man-holes.	Lamp-holes.	Inlets.	Length in feet.	
Amherst St. & Alley	Massachusetts Av.	Greenhalge St.	Akron pipe	10 and 8	8.9	3	..	36	685.0	*a* $3,143 60
Amherst Alley	Robinson St.	Greenhalge St.	"	8	6.6	2	..	41	486.8	*b* 156 42
Bancroft	Western Av.	Southerly	"	15	10.9	..	..	4	95.4	844 10
Belmont	End of old sewer.	West'ly to nr. Belm'nt line	"	15	8.8	3	..	21	610.9	362 89
Bird	Cushing Av.	Belmont St.	"	10	9.0	1	1	22	299.3	437 08
Bolton	Sherman St.	Easterly	"	8	7.6	2	..	31	445.0	*c* 613 30
Brookford	End of old sewer.	Southerly	"	8	4.7	1	..	4	39.6	*d* 1,276 72
Charles	First St.	Second St.	"	12	8.5	..	1	28	389.2	See Text.
Cottage Park Ave. and Private Lands	Massachusetts Av.	Harvey St.	Brick and concrete	30½ x 41	11.9	2	..	36	786.8	1,232 33
Cushing Ave	End of old sewer.	Westerly to Ericsson St.	" "	18 x 24	9.2	2	..	38	535.6	See Pioneer St
Deacon	Pioneer St.	Westerly	Akron pipe	10	7.1	..	1	21	263.1	See Text.
Erie	Albany St.	Brookline St	Brick and concrete	18x21 / 15x18	10.0	3	..	61	756.7	307 85
Harris Court	End of old sewer.	Harris St.	Akron pipe	12 and 10	6.1	1	1	22	288.8	155 77
Locust Court	Locust St.	Northerly	"	8	8.9	..	1	14	199.0	214 74
Marcella	Portland St.	Berkshire St	"	10	8.1	1	..	18	270.0	See Belmont St.
Norman	Belmont St.	Northerly	"	10	6.9	1	..	18	265.9	See Belmont St.
Norumbega	Belmont St.	Northerly	"	10	8.5	1	..	11	207.0	See Willard Ct.
Longfellow Park	Willard St. Ct	Easterly and Northerly	"	10 and 8	9.4	1	1	5	273.6	*e* 406 18
Pioneer	Main St.	Southerly	"	10	9.1	1	..	13	208.4	322 90
Whittemore	Madison Av.	Westerly	"	10	7.6	1	1	23	309.2	*f* 284 07
Willard Court	End of old sewer.	Longfellow Park	"	10	6.8	..	..	6	103.4	$9,757 95
						26	7	473	7,518.7	

a Includes cost of 467.3 feet of Storm Sewer.
b Includes cost of 486.8 " "
c Includes cost of { 414. feet of 8-inch Sanitary Sewer, / 214.2 " 12 " Storm " rebuilt. / 39.6 " 12 " " " extended.
d Pile oundation
e Includes cost of Deacon St. Sewer.
f Includes cost of Longfellow Park Sewer.

IMPROVED SEWERAGE CONSTRUCTION.

Sanitary Sewers Constructed Between December 1, 1900, and December 1, 1901.

Location.			Construction.							
Street.	From	To	Material.	Size in inches.	Av. depth of Cut.	Man-holes.	Lamp-holes.	Inlets.	Length in feet.	Length of Streets newly Sewered.
Amory	Hampshire St	Broadway	Akron pipe	8	9.2	4	..	93	1,201.7	..
Antrim	Cambridge St	Broadway	"	8	11.0	4	..	109	*1,284.0	..
Brookford	Massachusetts Av.	Southerly	"	8	7.1	1	..	32	414.0	39.6
Brookline	Pacific St	Allston St	"	12, 10 & 8	10.4	5	..	83	1,451.2	..
Erie	Albany St	Brookline St	Brick and concrete	18 x 21 15 x 18	10.0	3	..	59	984.1	756.7
Massachusetts Ave., Cottage Park Ave., and Private Lands, Montgomery St., Rindge Ave. and Sherman St.	Magoun St	Bolton St. (S'ly Arm)	Brick and concrete	30½ x 41 29 x 39 27 x 36 22 x 29½	15.0	14	..	255	4,350.8	786.8
						31	..	631	9,685.8	1,583.1

* Sewer incomplete.

CITY ENGINEER.

SEWERS RECONSTRUCTED BETWEEN DECEMBER 1, 1900, AND DECEMBER 1, 1901.

Location.			Construction.							
Street.	From	To	Material.	Size in inches.	Av. depth of Cut.	Man-holes.	Lamp-holes.	Inlets.	Length in feet.	Total Cost.
Columbia	Hampshire Street.	Southerly	Akron pipe	12	7.6	..	..	18	198.9	$220 07
Portland	Albany Street	Northeasterly	Brick and concrete	24 x 30	10.0	..	..	12	112.2	1,034 88
								30	311.1	$1,254 95

IMPROVED SEWERAGE CONSTRUCTION.

Storm Sewers Constructed Between December 1, 1900, and December 1, 1901.

Location.			Construction.					
Street.	From	To	Material.	Size in inches.	Man-holes.	Lamp-holes.	Inlets.	Length in feet.
Amherst Alley.....	Greenhalge St.....	Amherst St.....	Brick and concrete, Akron pipe.	18 x 20 15, 12 and 10	..	1	34	467.3
Amherst Alley.....	Robinson St.....	Greenhalge St	Akron pipe.....	15, 12 and 10	..	..	37	486.8
Brookford.....	Massachusetts Av.	Southerly	"	12	..	..	22	*253.8
Erie	Albany St.....	Brookline St	Brick and concrete	45 x 42½ 42 x 39⅝ 36 x 34	..	..	..	1,012.2
						1	93	2,220.1

*Includes 214.2 feet relaid, and 39.6 feet extended.

IMPROVED SEWERAGE.

Work upon the Improved Sewer System in Massachusetts Avenue, Montgomery and Sherman Streets was continued from August of 1900 to February, 1901, when the sewer as far as Bolton Street was completed. In connection with this system the sewer in Brookford Street, never satisfactory before, has been relaid and extended at a lower grade. The total length of sewers completed in this system has been 4,764.8 feet; the cost has been $57,456.65.

Work was begun March 26, 1901, on the proposed system, having its connection with the Metropolitan Sewer in Portland Street at Hampshire Street. This sewer in Hampshire and Cambridge Street is to be the main trunk for the large district lying west of Portland Street and north of Broadway to Sacramento Street. To date 3,650 feet of sewer have been constructed in Hampshire Street, also 1,290 feet in Antrim Street and 1,200 feet in Amory Street as branch sewers to the above.

Early in the season a Carson Sewer Trench Excavating Machine was purchased for use on this and similar work by the Sewer Department. A largely signed petition was presented for improved sewerage on Brookline Street, between Pacific and Erie Streets, and about August 1st work was commenced on this system. It was found that the best results could be obtained by giving a part of this district a new connection with the Metropolitan Sewer in Albany Street; so a new connection was made with this sewer at Erie Street and two sewers, one a storm water sewer and one a sanitary sewer, were built in Erie Street, from Albany Street to Brookline Street, a length of about 984 feet, and a sanitary sewer in Brookline Street, from Allston to Pacific Street, a length of about 1,451 feet. Some work, making connections with private drains, etc., still remains to be done.

The amount expended on this system to date is $14,064.12.

A petition was also received from owners in the vicinity of Buckingham Street for improved sewerage, but so much other work had been undertaken that action on this matter was postponed until a future time. Complaints continue to be received of defective sewerage in other parts of the City. It is evident that the work of extending the improvement by introducing the separate system or otherwise will have to be continued for some time to come until the many large sections now suffering from back water at times of heavy rain are relieved. To complete this will involve a large amount of work and great expense, but it is something for which the demand is likely to be more imperative as time goes on and the difficulty increases.

In the sewering of the large territory fronting on Charles River, and between Main Street and Brookline Street a further extension of the separate system will have to be made on a large scale, when these lands are built upon and occupied. The sewers already built and crossing these lands have been built with this end in view and as part of a comprehensive plan.

FINANCIAL.

CONSTRUCTION GENERAL.

Appropriation		$18,000 00	
Expended		9,740 58	
Balance unexpended			$8,259 42
Received from assessments	$7,377 34		

MAINTENANCE.

Appropriation		$18,950 00	
Expended		18,928 99	
Balance unexpended			$21 01

IMPROVED SEWERAGE.

Appropriation (met by loan)		$125,391 65	
Expended		76,546 14	
Balance unexpended			$48,845 51

WATER WORKS.

The following statement shows the condition of the water in the various reservoirs since 1870, and affords a ready means of comparison of interesting data for the different years:—

Year.	*Annual rainfall.	FRESH POND. Elevation of high water, 16.85.				STONY BROOK BASIN. Elevation of crest of dam, 81.00.						HOBBS BROOK BASIN. Elevation of crest of dam, 181.00.			
		Highest Water.		Lowest Water.		Highest Water.		Lowest Water.		No. of days water wasted over dam	Number of Gallons Wasted	Highest Water.		Lowest Water.	
		Date.	El.	Date.	El.	Date.	El.	Date	El.			Date.	El.	Date.	El.
1870	41.53	April 21	16.85	Nov. 22	12.44										
1871	40.09	May 8	15.32	Oct. 5	12.68										
1872	51.98	Oct. 1	16.17	Dec.19,'71	13.00										
1873	46.10	April 2	16.55	Nov. 7	12.52										
1874	41.87	June 8	15.24	Nov. 27	11.80										
1875	51.46	June 24	12.60	Feb. 23	8.97										
1876	43.60	May 31	13.27	Jan. 6	10.60	Conduit from Fresh to Little Pond completed.									
1877	48.93	April 7	16.31	Oct. 4	12.05	Filter gallery built at Little Pond—Water drawn to Fresh Pond from Oct. 11 to end of year.									
1878	50.99	May 1	16.43	Nov. 17	13.54	Water admitted to Fresh Pond through conduit from July 26 to the end of the year.									
1879	39.64	May 1	15.80	Nov. 28	12.11										
1880	33.31	April 5	13.08	Nov. 30	8.34	Water admitted to Fresh Pond through conduit from Sept. 28 to the end of the year.									
1881	42.85	April 18	16.04	Feb. 9	7.73										
1882	39.62	Mar. 28	15.87	Nov. 30	10.69										
1883	29.75	April 14	11.93	Nov. 26	5.91	Water admitted to Fresh Pond through conduit from Jan. 24 to April 13.									
1884	46.07	April 27	14.08	Jan. 1	5.54	Water admitted to Fresh Pond through conduit from Jan. 16 to April 10.									
1885	48.98	May 4	10.61	Oct. 29	5.95	Water admitted to Fresh Pond through conduit from Feb. 10 to Mar. 2.									
1886	46.12	May 12	13.74	Dec. 1	6.62	Water admitted to Fresh Pond through conduit from Jan. 13 to Mar. 31. Conduit abandoned 1887.									
1887	43.99	May 1	8.00	Nov. 5	3.32	Aug. 15	75.00	Jan. 22	†51.70						
1888	60.01	May 13	16.25	Jan. 1	9.66	Mar. 22	83.40	Dec.11,'87	72.43	244	7,315,800,000				
1889	60.08	Jan. 8	16.62	Oct. 12	13.72	Dec.19,'88	82.91	July 2	80.75	363	10,202,600,000				
1890	49.32	April 10	16.74	July 27	13.69	Mar. 24	82.40	Sept. 6	71.66	302	8,929,800,000				
1891	49.11	Mar. 24	16.78	Aug. 26	12.19	Jan. 23	83.31	Nov 10	72.20	299	8,214,400,000				
1892	41.17	May 23	16.64	Aug. 3	12.29	Mar. 11	82.80	Nov 10	69 56	202	3,804,100,000				
1893	39.52	May 5	17.07	Nov. 3	11.67	Mar. 15	82.83	Sept. 9	64.50	133	4,735,800,000				
1894	35.66	June 1	17.15	Sept. 18	10.65	Mar. 7	82.24	Oct. 25	68.40	164	2,852,600,000				
1895	49.72	June 2	17.30	Sept. 15	11.44	April 15	82.56	Dec 11,'94	74.80	224	5,304,200,000				
1896	41.77	April 27	16.49	Nov. 24	10.95	Feb. 7	83.30	Sept. 5	66.13	225	5,852,700,000				
1897	43.35	June 11	17.34	Dec.1,'96	11.41	Mar. 25	82.00	Nov 1	71.02	256	4,016,600,000				
1898	53.09	May 2	17.35	Oct. 19	15.23	Feb. 22	82.27	Aug. 5	75.42	260	5,704,600,000	Oct 27	181.53	Dec.16,'97	‡159.00
1899	44.96	Jan. 27	17.15	Sept. 19	13.17	Mar. 6	82.25	July 8	75.30	175	6,969,500,000	Mar. 20	181.27	Nov. 30	175 93
1900	51.29	April 23	17.46	Sept. 16	13.96	Mar. 2	82.81	July 9	77.04	145	4,447,100,000	Mar. 17	181.85	Jan. 10	175 10
1901	46.87	May 25	17.62	Nov. 17	14.45	April 8	82.54	Feb. 26	78.10	159	6,073,150,000	April 8	181.85	Dec 1, '00	177 30

* Record of annual rainfall taken at Harvard Observatory during the years 1870 to 1879 inclusive, at Fresh Pond from 1880 to 1889, and at Stony Brook from 1890 to 1900.

† The water gates at Stony Brook Dam were first closed June 9, 1887, with water at elevation 58 80. Water was formally introduced into Fresh Pond Nov. 15, 1887, and first flowed over dam Jan. 3, 1888.

‡ The water gates at Winter St. Dam were first closed Dec. 16, 1897. The basin filled in 247 days and water first flowed over dam Aug. 20, 1898.

Water wasted over the Stony Brook Dam as follows :—

December, 1900	374,200,000 gallons
January, 1901	9,300,000 "
February, 1901	——— "
March, 1901	1,088,600,000 "
April, 1901	2,160,400,000 "
May, 1901	1,906,650,000 "
June, 1901	502,100,000 "
July, 1901	——— "
August, 1901	5,000,000 "
September, 1901	——— "
October, 1901	5,250,000 "
November, 1901	21,650,000 "

Total amount passing the dam during the year 6,073,150,000 gallons.

TABLE: SHOWING COMPARISON BY MONTHS OF THE TOTAL PRECIPITATION AT STONY BROOK BASIN, HOBBS BROOK BASIN, HARVARD OBSERVATORY AND CAMBRIDGE CITY HALL; ALSO THE NUMBER OF DAYS IN WHICH RAIN FELL AT CITY HALL. DECEMBER 1, 1900, TO DECEMBER 1, 1901.

Point of Observation.		1900.	1901.										
		Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Total
Stony Brook Basin.	Total Precipitation.	2.52	1.42	1.17	6.71	6.78	7.56	1.13	5.44	4.67	4.01	2.68	2.78	46.87
Hobbs Brook Basin.	Total Precipitation.	2.29	1.34	1.10	5.52	6.72	7.67	1.22	5.83	3.59	2.95	2.75	2.77	43.75
Harvard Observatory.	Total Precipitation.	2.53	1.73	1.16	6.74	8.26	7.41	1.09	4.06	3.95	3.78	2.87	2.80	46.38
City Hall.	Total Precipitation.	2.23	1.63	0.88	6.49	7.72	6.77	1.28	4.70	3.87	3.55	2.65	2.88	44.65
	Number of days rain fell.	4	6	2	10	10	11	6	8	8	8	3	5	81

The trial of the damage case of Mr. Joseph Evans, having a farm in Lexington at the head of the Hobbs Brook Basin, before three Commissioners, referred to in the report of 1900, was closed in the early part of the year and the award of the Commissioners made. This award is not considered a satisfactory one to the City.

TABLE SHOWING RAINFALL AT STONY BROOK BASIN AT WESTON, AT HOBBS BROOK BASIN IN WALTHAM, AND THE CITY HALL AND HARVARD OBSERVATORY, CAMBRIDGE, DECEMBER 1, 1900, TO DECEMBER 1, 1901.

Day of Month.	1900. DECEMBER.				1901. JANUARY.				FEBRUARY.				MARCH.				APRIL.				MAY.				JUNE.				JULY.				AUGUST.				SEPTEMBER.				OCTOBER.				NOVEMBER.				Day of Month.
	Stony Brook.	Hobbs Brook.	City Hall.	Harvard Observ.	S. B.	H. B.	C. H.	H. O.	S. B.	H. B.	C. H.	H. O.	S. B.	H. B.	C. H.	H. O.	S. B.	H. B.	C. H.	H. O.	S. B.	H. B.	C. H.	H. O.	S. B.	H. B.	C. H.	H. O.	S. B.	H. B.	C. H.	H. O.	S. B.	H. B.	C. H.	H. O.	S. B.	H. B.	C. H.	H. O.	S. B.	H. B.	C. H.	H. O.	S. B.	H. B.	C. H.	H. O.	
1		0.04							0.10	0.20		0.09									0.24	0.24	0.23	0.27		0.02		T										0.07	0.42	0.05						0 10			1
2														0.12	0.12	T		0.04		T							0.25			T			0.37	0.28		0.63									2
3																0.11				0.10	0.95	1.20		0.93								T					0.67	0.60	0.50	0.61								3
4													0.47	0.22	0.20	0.25	1.65	1.50	1.52	1.50			0.80								0.15			0.10	0.18											4
5	1.80	1.70	1.65	1.74					0.90	0 70	0.70	0.78	0.29	0.35	0.23	0.26	0.16	0.15		0.12									0.16	0.07			0.19			0 07							0.15							5
6												T						0.02	0.92	0.01											T						0.14	0.15		0.13								6
7																	1.59	1 65	0.90	1.84									0.29	0.25	0.15		0.14	0.13	0.20	0.19				T							7
8																	0.08	0.10	0.05	0.14					0.42	0.45	0.40	0.43					0.99	0.70	0.95	1.18											8
9														0 09		0.10	0.08	0.05		T										0.08	T																9
10					0.40		0.42						0.37	0.16	0.36	0.25	0.12	0.13	0.13	0.15	0.61	0.38	0.30	0.38							0.14	0.42								0.40									10
11						0.40		0.51				T	0.38	0.21		0.87		0.08		0.07	0.89	0.65	0.74	0.70								1.40		0.09	0.06		0.07	0.24	0.08	0.97	0.99								11
12					0.64	0.62	0.87	0.89					1.77	1.60	1.98	1.12													1.11	0.73		0.88			0 05		1 30	0.35	0.15	0.12						0.11	0 40	0.15	12
13								T														0.22	0.25	0.24												0.25			0 23					0.46	0.30		0.17	13
14													0.11	0.08	0.08	0.10					0.26																				0.25	2.00	0.46					14
15				T.			0.05	T																															0.30		1.79	1.60		1.67					15
16		0.02		0.05		0.08	0.03	0.09									0.35	0.35	0.62	0.59																	0.50	0.32		0.34								16
17					0.16	0.02	0.08					0.01					0.22	0.14	0.10	0.13											0.22				0.17				0.50									17
18					0.07	0.08		0.10												T			0.42						0.77	1.00		0.25	0.20	0 10	0.09	0.09	0.40	0.38	0.30	0.52	0.08	0.15						18
19																					0.82	1.03	1.86	1.13											0.03		0.30	0.17		0.24					0.06	0.10	0.11	19
20																				T	1.54	1.55	0.12	1.40						0.08			0.10	0 10		0 09			0.16					0.14	0.04	0.10	0.08	20
21													0.10	0.05	0.15	0.09	0.08	0.07		0.09		0.02		T				0.03									0.12			0.12								21
22													1.25	0.98	1.40	1.50	0.24	0.26	0.37	0.29						0.33		0.46		0.09																	22
23												T					0.17	0.13		0.05	0.11	0.12		0.05	0 57		0.38																		T		23
24	0.28	0.25	0.18	0.26		0.07			0.17	0.20	0.18	0.23					0.08	0.10	0.90	0.04			0.08		0.07	0.32	0.05	0.11							2.20										2.03	0.18	24
25													0.19	0.13	0.12	0.10	1.21	1.40		2.40	0.95	0.98	0.92	1.10	0.07	0 10	0.05	0.06	0.99	1.08	1.00	0.95	2.96	2.40		2.26									2.16	2.08	0.25	2.07	25
26													0.74	0.57	1.85	0.90	0.65	0.55	2.21	0 74											T				T								0.02	0.08		0.04	26
27													1.04	0.96		1.09					0.37	0.33		0.33																								27
28		0.03	0.05																		0.77	0.90	1.05	0.88							1.70																	28
29																					0.05	0.05					0.15		1.98	2.05		1.98						0.75	0.75	0.44								29
30																														0.06							0.53	0.15		0.10								30
31	0.44	0.25	0.47	0.48	0.15	0.07	0.18	0.14																																							31

A survey and plan has been made of a tract of land in Waltham at the foot of "Bear Hill" owned by Mr. Nathan Warren, which it is proposed to purchase with a view of preventing the continuance of a condition of the premises, dangerous to the purity of the water supply.

The construction of a surface water drain near the east end of the Winter Street dam has been begun. This drain will be of vitrified drain pipe and about 1,300 feet in length.

PARK DEPARTMENT.

There have been employed on the work connected with the Park Department three assistants ; two of them during the entire year.

But little work of an engineering character has been done on the lower section of the River Parkway ; about 120 feet of curb have been set at the corners of Greenhalge Street with the Esplanade in Section B.

In Section C, the most important work has been the filling of the Parkway from near the end of the present sea-wall opposite the proposed extension of Erie Street to the Boston & Albany Branch Railroad, and in connection therewith the filling of the flats and marshes in the rear, owned by various private owners. As it is proposed to extend the present sea-wall but a short distance beyond its present terminus and to continue the Parkway with a beach construction of gravel, it became necessary to construct a temporary bulkhead along this part of the way, as it was proposed to do the filling by means of an hydraulic dredge. A contract was made with Mr. Joseph Ross of Boston for the construction of the bulkhead. Two thousand, two hundred and seventy-eight lineal feet of bulkhead were built. The total cost of the bulkhead with extra work and piling was $12,996.71. As the bulkhead is located in the place to be occupied by the beach, when this is constructed the upper part of the bulkhead will be cut away and the beach built in front of and over the remaining portion.

The Parkway here being but a narrow strip between the bulkhead as built and the rear line of the park land, and the adjoining land being low, it was necessary to either build another bulkhead on the rear line or fill the lands of private owners to a large extent.

An arrangement was finally made with the owners of said lands by which the City was to pay an amount equal to the estimated cost of a bulkhead and dyke on the rear line toward the cost of filling the private lands, the owners agreeing to fill the land at the same time and to the same grade as the City lands.

A contract was made with the New England Dredging Company to do all the filling and the contract was completed October 30, 1901.

Under this contract $18,812.30 have been paid for the filling of City lands and the sum of $5,534.60 has been paid the same company as the estimated cost of the rear bulkhead and dyke, toward the filling of the private lands.

By this a very great improvement has been accomplished; about 253,460 square feet of the City park lands have been filled and also about 673,645 square feet of private ownership, consisting of marsh and flats, have been reclaimed and made ready for future development.

There now remains but the short section between the railroad and Brookline Street, about 400 feet in length, to be filled.

This Parkway now forms the front boundary of an immense tract, containing, between Main Street, the Parkway, and the railroad location, about 7,329,000 square feet, or 168¼ acres of land largely unoccupied at present, as shown by the accompanying plan of the territory with the existing and suggested system of streets indicated upon it. It will be seen by inspection of the plan what an important part the Parkway forms of this system, and how large a part it must have in the development and sale of the lands.

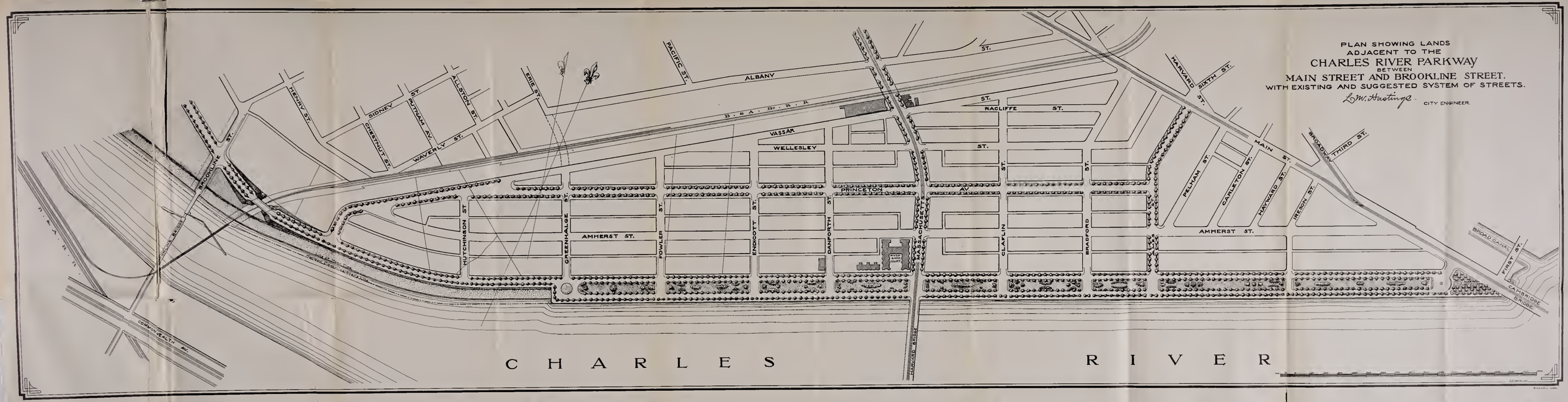
The construction of the beach and roadway, the crossing of the railroad by a bridge, and the construction of the Parkway to connect with Brookline Street are absolutely necessary to complete this part of the work and make the portions already built of the most service.

In Section E, between River Street and Western Avenue, surveys, plans and descriptions were made for the taking of a strip of land about 75 feet wide and about 1,040 feet long, along the harbor line, thus making the connection at this point between the parts of the Parkway already taken. Seventy-seven thousand, one hundred and ninety-three square feet of land were taken by action of the City Council approved March 22, 1901.

In Section F, from a point opposite the foot of Dunster Street, easterly about 1,800 feet a considerable amount of work has been done on the beach and road construction.

The stone sea-walls of the three wharves long known as "Richardson & Bacon's Wharf," (formerly called the "College Wharf") "Sargent's Wharf" and "Stickney's Wharf" have been largely removed under a contract made with Augustus Bellevue & Company. Such of this stone as is suitable is being placed so as to be used in the proposed extension of the sea-wall opposite Putnam Avenue, and the poorer grade of stone is being placed in front of the bulkhead near the Boston & Albany Railroad where the beach is to be built.

Loam has been placed and trees set on about 600 feet of Parkway in the rear of the Cambridge Hospital grounds. At the Russell School on


PLAN SHOWING LANDS
ADJACENT TO THE
CHARLES RIVER PARKWAY
BETWEEN
MAIN STREET AND BROOKLINE STREET.
WITH EXISTING AND SUGGESTED SYSTEM OF STREETS.
L.M. Hastings
CITY ENGINEER.
CHARLES
RIVER
BROOKLINE ST.
HENRY ST.
SIDNEY ST.
CHESTNUT ST.
PUTNAM AV.
WAVERLY ST.
ALLSTON ST.
ERIE ST.
PACIFIC ST.
ALBANY
B. & A. R.R.
VASSAR
WELLESLEY
PRINCETON
AV.
RACLIFFE ST.
HARVARD ST.
SIXTH ST.
MAIN ST.
BROADWAY
THIRD ST.
PELHAM ST.
CARLETON ST.
HAYWARD ST.
IRESON ST.
AMHERST ST.
HUTCHINSON ST.
GREENHALGE ST.
FOWLER ST.
ENDICOTT ST.
DANFORTH ST.
MASS. AV.
CLAFLIN ST.
BRADFORD ST.
BROAD CANAL
FIRST ST.
CAMBRIDGE BRIDGE
HARVARD BRIDGE
COMMONWEALTH AV.

Larch Street and at the new Washington School on Cambridge Street plans were made and grades given for grading and loaming the grounds and yards.

At Hastings Square lines and grades were set out for an entirely new arrangement of paths and shrubbery and surface grading.

At the Cambridge Field a running track of one-third of a mile in length was staked out and built during the first part of the season.

Respectfully submitted,

L. M. HASTINGS,
City Engineer.

REPORT OF THE SUPERINTENDENT OF PUBLIC BUILDINGS

OFFICE OF THE SUPERINTENDENT OF PUBLIC BUILDINGS,
CITY HALL, CAMBRIDGE, December 1, 1901.

To the Honorable, the City Council of the City of Cambridge :—

GENTLEMEN: — In compliance with the requirements of Section 2, Chapter 13, of the City Ordinances, I have the honor as Superintendent of Public Buildings to submit the sixteenth annual report of this department, comprising a detailed account of the building operations in our city, together with the amount expended on city property.

Responsibility for the care, repair and maintenance of our city buildings is under the immediate supervision of this department and their condition is governed entirely by the amount appropriated yearly. The valuation of city property under the control of this department is $2,367,828 of which amount $1,779,300 is represented in the valuation of buildings alone.

Recognizing the responsibility of the judicious expenditure of the amount appropriated by your Honorable Board for the care and repair of our city buildings, it has been the custom of this department to carefully investigate the demands made by the various departments for improvements in their quarters and to make a judicious expenditure of the funds for which I am in a measure responsible and to the end that the best results may be obtained.

It must be conceded that there exists many serious faults in construction, accommodation and sanitary conditions in a great many of our buildings; it could not be otherwise when the age of their construction is considered and the rapid advances made in late years in sanitation and ventilation, yet by the wise expenditure of the appropriation available for such purposes, results have been satisfactory.

A comparison of the building operations in our city the past year, shows an increase in number of permits issued, while the valuation shows a decrease. This is readily explained by the fact that in 1900 the list comprised such buildings as the Riverbank Court Trust building, and nearly $900,000 in Harvard University buildings; deducting the latter shows a material gain in taxable property. In 1900 the estimated cost of new buildings was $1,967,890, while in 1901 the estimate is $1,400,310.

The number of permits issued in 1900 was 455 while in 1901 there were 567. While the table shows a material gain in the building operations, it is also gratifying to note the constantly increasing costliness of the structures. Their architectural beauty is noticed by visitors to our city and the demands of public taste has been very pronounced in its call for modernized apartments, and the old fashioned tenements with their meagreness of appointments, untidy and unsightly appearance has given way to the demands of modernized and attractive structures.

While it would be unfair to criticise the construction of buildings in former years, as they were good in their day and served well the needs at that time, yet it is to show that the public while not demanding extravagant or luxurious appointments, seek rather the attractive commodiousness of modern apartments. The progress in this direction can be traced to the carefully drawn building ordinance of our city.

CITY BUILDINGS—CARE AND REPAIRS.

With a constant demand to modernize our old buildings and the yearly improvements and conveniences desired requires increased appropriations. Attention is called to the fact that most of our city buildings have been in use for many years and the wear and tear on property of this description and the cost of repairs which are absolutely necessary to keep them in a habitable condition, to say nothing of extraordinary repairs in drainage, plumbing and heating, is much larger than is usually supposed.

Roofs, floors, walls and ceilings have to be constantly renewed or repaired, supplies furnished to various departments and various other work of a miscellaneous character is in constant demand. Then again the materials and labor entering into the construction and repairs of buildings have greatly advanced in price, rendering it necessary to call for additional appropriations. I simply call attention to these facts in order to show that any curtailment in the current expense of maintenance would seriously effect the condition of our public buildings.

CITY HALL.

The customary repairs have been made on this building. A portion of the basement floor, which was very much decayed, has been removed and granolithic substituted. A small portion of the wooden floor still remains but is in such a serious condition that it will have to be replaced with granolithic the coming year.

The northeast corner room in the basement has been given up for the use of the City Clerk in order that he might have suitable quarters for the storage of his election materials. By moving the school supply room

from the third story to the basement gives an extra room which can be devoted to the use of departments or committee purposes.

The external woodwork on the building will have to be painted the coming season. The curtains which have become very badly worn and defaced will have to be replaced by new ones and the customary repairs throughout the interior of the building will require the usual and yearly appropriation. A curtailment of expense in this line would result in a detriment to the building. The interest displayed and care given by those having charge of the building deserves the highest commendation.

Mr. Charles Gay who has been constantly employed as janitor of our City Hall for thirty years and whose courteous deportment won for him the esteem and confidence of the City Council, and who had become incapacitated to continue his duties, by reason of sickness, was granted a three months vacation without loss of pay, in consideration of his long and faithful service to the city. Mr. Gay returned at the expiration of his vacation much improved in health and has been able to continue with his duties.

CENTRAL SQUARE BUILDING.

At the beginning of the year, this department was intending to make various improvements in this building, but owing to the limited appropriation for care and repair of city buildings, a portion of the work had to go over for another year.

Prism glass was substituted for plain glass in several places, mostly in corridors which affords additional light to stairways. The coming year many of the rooms should be repainted and tinted in order to make them healthy and comfortable for the public. The Ward room in this building is in very bad condition and will require an appropriation sufficient to completely renovate it.

BRATTLE SQUARE BUILDING.

This building has received such repairs as were necessary to keep it in a proper condition. A room was fitted up in the basement for the accommodation of the Sealer of Weights and Measures whose quarters were moved from the City Hall to this building. The Disrict Court rooms located on the second floor have been repainted and tinted the past season and are now in good condition. I would recommend that the rental of these rooms to the County for Court purposes be one thousand dollars per year instead of four hundred and fifty as now received. The Ward room in this building together with the police quarters should be repainted and tinted the coming year.

CITY BUILDING, WARD FIVE.

This building is in very bad condition and nothing has been done the past year towards its improvement. The subject of a new city building for the needs of this section was before the City Council for their consideration and after a thorough investigation by that Body it was not deemed advisable at this time to erect a new building. While it was admitted by the committee appointed to investigate the needs of a new building, after a thorough discussion of the uses to which the building should be devoted, it was unanimously agreed that the city should take some action towards improving the condition of its present building as it is unhealthy and the sanitary arrangements are very defective.

Should the needs of the city continue to require the use of this building, I should recommend that a new building be erected containing modern improvements and such accommodations as the needs of the city may require. Any considerable outlay on the present building I should consider poor economy and if its location is suitable, I should recommend demolishing the old building and erecting a new structure upon entirely different lines from those of the present building.

ARMORIES.

Under statute law the city is obliged to provide accommodations for its Militia Companies, satisfactory to the Adjutant General. As much criticism has been made the past few years upon the quarters furnished by the city and in view of the fact that a third company has been formed here, the attention of the City Council was called to the needs of an armory for militia purposes, and through a recommendation made by the Committee on Public Property, the City Council accepted on November 19, 1901, the provisions of Chapter 384 of the Acts of the Year 1888, entitled "Acts to provide Armories for the Massachusetts Volunteer Militia," and designated that the amount of the loan necessary to meet the expenses of acquiring the land and erecting the armory to be one hundred and fifty thousand dollars ($150,000.00.) This order was approved November 22, 1901.

The city has leased from Mr. S. H. Woodbridge a building owned by him on Beech Street which was formerly used as a gymnasium. Mr. Woodbridge built an addition to the main building for the accommodation of officers' quarters and for lockers for uniforms. The lease runs until July 1, 1904, at a rental of five hundred dollars per year. The main building is used for drill purposes, but is entirely inadequate for that purpose, but as this building seemed to be the only one available and as it was imperative that some place be furnished for the needs of this

new company, the city had no alternative than to lease the building for militia purposes.

I am informed by the Armory Commissioners that as soon as the land is selected and plans prepared, the erection of the new building will be commenced at once, and it is hoped that by January, 1903, the structure will be ready for occupancy. After the building is erected and occupied the city will be under no expense for maintenance or repairs. The State furnishes and maintains it for thirty years. The city receives as rentals from the State four hundred dollars yearly for each company. The city in return pays the State interest on the one hundred and fifty thousand dollars and an extra amount to cover the sinking fund.

The city will receive from the State for rentals the coming year $1,000. I have carefully computed the yearly cost of armories in our city for the past six years and find that it averages $1,723. Since hiring the Beech Street Armory the expense will be far greater as we pay $500 for rent and about $300 for maintenance. The captain has petitioned for a janitor to care for this building and under the requirements of statute law the city is obliged to furnish and care for its private armories, but owing to limited appropriation the past year I found it impossible to supply janitor service and the captain very kindly appointed one of the enlisted men to care for it until the first of the year.

The coming year the expense of this building is estimated at $1,100. This will bring the expense of maintenance of our three armories to about $2,800. It should be considered in connection with these figures that the city buildings used for armory purposes are valuable for city use. Should the city be obliged to hire the same amount of room as now occupied by the two companies, it is safe to presume that it would cost $2,000. Adding this to the cost of maintenance, it would make the yearly cost to the city $4,800 to maintain militia quarters. Deducting $1,000 to be allowed by the State brings the net cost to the city to $3,800. The amount allowed by the State the past year was $1,200, but owing to inferior quarters furnished Adjutant General has reduced the amount to $1,000.

CARE AND REPAIR OF CITY BUILDINGS.

CITY HALL.

For fuel	$1,004 50
Electric lighting	1,063 85
Gas lighting	36 10
Repairs	1,412 74
Supplies	570 53
Janitor	1,200 00
Engineer	1,350 00
Fireman	730 00
Watchman	730 00
Sundry labor	2,662 01
Total	$10,759 73

WARD ONE BUILDING, BRATTLE SQUARE.

Fuel	$871 20
Electric lighting	161 25
Gas lighting	454 50
Repairs	1,324 63
Supplies	43 09
Janitor	1,400 00
Extra labor	154 50
Total	$4,409 17

WARD FOUR BUILDING, CENTRAL SQUARE.

Fuel	$474 75
Electric lighting	376 00
Gas lighting	104 30
Repairs	179 43
Supplies	27 85
Janitor	1,400 00
Extra labor	148 00
Total	$2,710 33

Miscellaneous account	$2,050 75

SCHOOLHOUSES — CARE AND REPAIRS.

The amount expended for care and repair of schoolhouses this year was $76,128.52, this does not include the sanitary changes made in various school buildings for which a special appropriation was made.

There are forty-one schoolhouses occupied, twenty-seven being of brick and fourteen of wooden construction When we consider that several of these wooden buildings are fifty and sixty years old, it will be readily seen that the cost of care and repair is far greater than on those of more recent date containing modern improvements. Notwithstanding the great improvements made in the sanitation and ventilation in these old buildings, much remains to be done yearly in order to keep them in a habitable condition.

The improvements made the past year compare very favorably with previous years. The question of heating and ventilation of our schoolhouses is one of the most serious problems this department has to contend with. Constant watchfulness to investigate defects reported to this department and prompt action to remedy where such defects exist has been the rule rather than the exception in this department.

During the past year the Lassell, Gannett, Tarbell and Riverside schoolhouses have been remodelled. The sanitaries have been removed and an entirely new system introduced. Following is a report of the work done on these buildings :—

On July 2, 1901, the City Council passed an order making an appropriation of $30,000 for improved sanitary arrangements in the above named buildings, also for removing the present boilers at the Rindge Manual Training School and substituting boilers of sufficient capacity for furnishing power and heat for the entire group of school buildings in the vicinity of the Manual Training School.

TARBELL SCHOOL.

On July 17, 1901, an advertisement was inserted in the *Cambridge Press* calling for estimates for furnishing materials and labor necessary to make sanitary and ventilation changes at the Tarbell School, corner of Howard and Grigg Streets, and on July 24th, the following bids were received: —

Herbert L. Rose	$4,050
Thomas F. Martin	3,575

The contract was awarded to Thomas F. Martin.

Constant complaint was received of the condition of this building and the repairs made were of a temporary nature. The defects were so serious that it was thought advisable to remove the entire system of sanitation and substitute modern fixtures. Additions were built on either side of the building to allow pupils access to the basement without being obliged to pass through the main building. The entire basement was concreted with one inch of granolithic placed on top for a wearing surface. The old closets were removed and Lock, Stevens & Company's Beaconia combination double thick vitreous earthenware hopper with special top seat vent were substituted.

Special ventilation was put in the basement to prevent any foul gases passing into the school rooms. A comparison of the conditions at this school at present with the former arrangements will be convincing proof that the money was well expended. Since the opening of the school in the fall, I have not received a single complaint of any disagreeable odors in the school rooms.

RIVERSIDE SCHOOL, PUTNAM AVENUE.

On July 17, 1901, an advertisement appeared in the *Cambridge Press* calling for estimates for making additions, alterations and sanitary changes in this building, and on July 25th the following estimates were submitted: —

Thomas F. Martin	$3,800
Herbert L. Rose	3,610
Frank J. O'Reilly	3,450

The contract was awarded to Frank J. O'Reilly.

Similar conditions existed in this building as at the Tarbell School, with the exception that only a portion of the basement had to be concreted. All the sanitary arrangements in the basement were removed and modern fixtures substituted. A ventilating shaft was built from the basement through the roof, and in its base a heater was placed in order to aid in ventilation. A new drain was substituted for the old one, and the condition of the sanitation and ventilation has been greatly improved. A careful inspection of the changes made will be convincing proof that these alterations were not made any too soon.

LASSELL SCHOOL, CHARLES STREET.

On July 24, 1901, there appeared in the *Cambridge Press* an advertisement calling for estimates for changes at the Lassell School, and on July 31st the following bids were received:—

Thomas F. Martin	$3,950
Frank J. O'Reilly	3,798
Fessenden & Libby Co.	3,350
Herbert L Rose	3,300

The contract was awarded to Herbert L. Rose.

The foundation wall on Charles Street side was very defective and had to be relaid. The entire basement had to be concreted, the old sanitaries removed, ventilation put in and a general rearrangement of the entire basement floor was made. Entrances were made on either side of the building to give access to the basement for the boys and girls. Additional light was supplied in the toilet rooms by increasing the number of windows. New drains were laid, properly traped and vented and the ventilation was improved by building a shaft from the basement through the roof. With these improvements made the building is now in a good sanitary condition.

GANNETT SCHOOL, JEFFERSON STREET.

On July 31, 1901, an advertisement appeared in the *Cambridge Press*, calling for estimates for alterations at the Gannett School, and, on August 8th, the following bids were received:—

Frank J. O'Reilly	$3,388
Herbert L. Rose	2,900
Thomas F. Martin	2,475

The contract was awarded to Thomas F. Martin.

As in the other buildings, the changes made in this building were principally in the sanitary arrangements. New fixtures of a modern pattern have taken the place of the old ones, and an improved ventilating

system for toilet rooms has been introduced. For several years complaints have been received of the sanitary condition of this building, and while temporary repairs were made from time to time, yet, for want of sufficient funds, nothing was done towards removal of the old flush vaults which were located in the basement.

Plans and specifications for these alterations were prepared by this department, and the results obtained through these changes have proved satisfactory. It should be noted that these numerous defects referred to which are found in the plumbing, drainage and ventilating system, and the many calls for repairs and alterations, are not peculiar to our public buildings alone, but are such as are found sooner or later in nearly all classes of buildings, both public and private.

Requirements in the line of modern improvements are emphasized more strongly, and are becoming more exacting each year. The demand is to modernize our old schoolhouses, and to do this a liberal expenditure of money is necessary.

ALLSTON SCHOOL.

On April 17, 1901, a fire was discovered in the Allston School and an alarm was given at about 8.30 P. M. This fire caused a damage to the building of nearly thirteen hundred dollars. The repairs were made and the expense was taken from the appropriation for care and repair of schoolhouses. An investigation of the building after the fire gave one the impression that it was of incendiary origin. Prompt and efficient efforts of the firemen prevented the total destruction of the building, as any delay on their part would have given the fire an advantage which it would have been hard to overcome on account of the location from which it started.

By taking prompt action repairs were made so that the school was reopened on the following Monday morning. In connection with this fire, I again desire to call to the attention of the City Council the subject of insurance on public buildings.

In my annual report of 1896, also of 1899, I called to your notice the matter of considering the advisability of the city insuring its own buildings, so that when a fire occurred there would be a fund available from which repairs could be made without seriously crippling this department by using the funds available for the ordinary running expenses in the care and repair of buildings. The subject seems to me to be worthy of your further consideration.

One argument used against adoption is that future governments seeing a fund available would divert it to other department uses, but this

objection could be met by a legislative act and thus only be used for repairing buildings damaged by fire, except after the fund had reached a certain amount, when it could be used for the construction of a schoolhouse. In this way the entire cost of a new building would not fall upon any one year and would insure to the city the building of a schoolhouse once in a certain number of years, the cost of which would come from the tax levy and not through a bonded debt.

HIGH SCHOOL.

Repairs were made necessary in this building by the discovery of the dangerous condition of the plastered ceilings in several rooms. One entire ceiling fell to the floor just after the pupils had left the room. Had it occurred a minute or two sooner the result might have been serious. An investigation of other rooms disclosed a number of defects which were remedied. The greatest danger was found in the assembly hall, where the heavy cornice was found to be loosened from the furrings and ready to fall. Had this happened during the occupancy of the room, nothing could have prevented serious results. Immediately upon the discovery of these defects the rooms were closed and no one except workmen were allowed to enter. Repairs were begun at once but several weeks were required to complete them.

The entrance steps had to be reset and painted. The tiling on the first floor was repaired and rooms in the basement were fitted up for school purposes. The amount expended for these changes and repairs amounted to about $1,500. The exterior of this building will require two coats of paint the coming year.

The work on the other school buildings has been the usual yearly repairs. The Tarbell, Riverside, Gannett and Lassell schoolhouses have received two coats of paint on the exterior.

NEW SCHOOLHOUSE, CORNER OF FELTON AND CAMBRIDGE STREETS.

In 1900, the City Council appropriated $80,000.00 for a fourteen room school building and Mr. George Fogerty was appointed architect to prepare plans and specifications. The contract was awarded to the Fessenden & Libby Company of Boston as builders. Work was begun in the early part of the year and the building will be completed in about another month. The builders were delayed to some extent by their failure to get their iron work on time. This can be attributed to the tie up in the iron works through a strike of their workmen. This was general

throughout the country and the contractors were powerless to furnish the necessary materials to properly carry on their work.

When the building is completed the city can point with pride to another schoolhouse with modernized accommodations. This building will be used in part for manual training purposes and to make it accessible from the present Manual Training School buildings, a series of underground tunnels have been constructed, making it possible to go from one building to another without being obliged to go out of doors.

Provision for heating this building has been provided by furnishing two large boilers to take the place of two small ones in the Manual Training School, thus reducing the cost of maintenance. The steam pipes are carried through the tunnels referred to and the services of only one engineer is required to heat the three buildings.

NEW SCHOOLHOUSE, WILLOW STREET, WARD TWO.

Under date of May 14, 1901, the City Council passed an order directing the Superintendent of Public Buildings to purchase for school purposes, about 25,000 square feet of land in the vicinity of Cambridge Field. The cost thereof was not to exceed the sum of nine thousand five hundred dollars and it was to be charged to the appropriation for new schoolhouse and land as made by an order of the City Council passed Dec. 21, 1897.

Acting under this order, land was purchased from Mr. Heffernan on the westerly side of Willow Street opposite the Cambridge Field for the sum named in the order. An order passed by the City Council requesting that the plans for the Willow Street schoolhouse be selected by a competition of architects and that a commission be appointed, consisting of His Honor, the Mayor, the Superintendent of Schools and the Superintendent of Public Buildings, to select and award the plans.

An advertisement was inserted in the *Cambridge Press*, and invitations were sent to twenty-four architects, of which number twelve accepted the invitations, and nine submitted drawings. After a careful study of the designs submitted, the Committee, appointed by the City Council, made the award to Mr. Aaron H. Gould, of 47 Devonshire Street, Boston, and the plans are so far perfected that estimates will be called for in the early part of January, 1902.

Under date of November 19, 1901, an appropriation of eighty thousand dollars was passed by the City Council to erect and furnish this building. It is hoped to have the building completed and furnished ready for occupancy by December 1, 1902.

The following table shows the amount of coal consumed in the various school buildings during the past year: —

	Tons.
Agassiz	70
Allston	80
Boardman	38
Corlett	13
Cushing	18
Dunster	25
Ellis	125
Felton	53
Gannett	50
Gannett (old)	20
Gore	65
Harvard	160
High	295
Holmes	15
Lassell	43
Latin	360
Lowell	30
Merrill	100
Morse	170
Otis	40
Parker	50
Carried forward	1,820

	Tons.
Brought forward	1,820
Peabody	124
Putnam	170
Reed	28
Rindge Manual Training	350
Riverside	28
Roberts	150
Russell	108
Sargent	37
Shepard	70
Sleeper	75
Stearns	38
Tarbell	30
Taylor	120
Thorndike	80
Washington	90
Webster	140
Wellington	100
Willard	75
Wyman	45
Total	3,678

REAL ESTATE BELONGING TO THE CITY.

SCHOOLHOUSES.

	Feet of Land.	Purchase of Land.	Erection of Building.	Valuation of Land.	Valuation of Building.	Valuation of Furniture.
Agassiz	19,689	1874	1875	$8,000	$20,000	$1,215
Allston	15,193	1857	1857 1873 remodelled	4,600	30,000	1,795
Boardman	10,018	1866	1868	4,000	13,000	1,290
Bridge	4,646	1836	1836	1,400	500	.....
Corlett	10,000	1880	1880 purchased	1,200	3,000	195
Cushing	14,787	1880	1880 purchased	1,500	3,000	136
Dana	14,317	1847	1848	4,300	2,000	100
Dunster	10,000	1857	1871 remodelled	3,000	3,000	261
Ellis	25,700	1897	1898	6,000	48,000	2,993
Felton	15,090	1847	1848	4,500	6,000	200
Gannett	15,434	1876	1886	3,000	12,000	430
Gannett (old) / Wellington	27,673	1864 1875	1865 1884	2,600 5,700	2,000 50,000	395 2,240
Gore	9,900	1871	1871	4,000	50,000	825
Harvard	20,494	1870	1871 burned 1899 rebuilt	12,000	65,000	3,769
High	74,366	.....	1891	40,900	220,000	9,220
Holmes	11,182	1870	1870	5,000	5,500	275
Lassell	10,000	1880	1886	3,000	8,000	272
Latin	79,759	1894	1897	43,800	225,000	27,150
Lowell	12,033	1883	1883	3,600	5,500	402
Merrill	37,828	1861 1864	1864	19,000	45,000	1,425
Morse	25,650	1889	1890	7,000	73,000	2,040
Otis	8,270	1842 1857 1858	1859 1870 remodelled	4,000	20,000	930
Parker	12,319	.....	1893	7,000	15,000	710
Peabody	21,813	1887	1898 1898 enlarged	9,800	68,000	3,340
Putnam	14,400	1825 1847 1896	1825 removed 1847 torn down 1889 rebuilt	9,800	64,500	2,550
Reed	12,090	1868	1868	1,200	4,000	310
Rindge, M. T.	81,128	.....	1887	44,000	56,000	8,000
Riverside	11,198	1868	1868	3,000	5,000	330
Roberts	16,400	1898	1898	12,000	48,000	3,003
Russell	33,073	1895	1896	6,000	40,000	2,440
Sargent	9,995	1838	1838	5,000	3,000	255
Shepard	14,755	1855	1856 1873 enlarged	11,000	26,000	1,047
Sleeper	21,284	1894	1894	5,000	24,000	1,190
Stearns	10,050	1812	1841 burned 1843 rebuilt	5,000	3,000	322
Tarbell	19,500	1878	1882	4,900	7,000	355
Taylor	23,592	1894	1895	6,000	36,000	1,720
Thorndike	10,027	1860	1860 1875 remodelled	4,000	30,000	1,676
Washington	14,951	1851	1851 1871 remodelled 1878 altered	10,000	25,000	1,830
Webster	25,839	1852 1866 1889	1852 1873 remodelled 1885 enlarged	9,000	50,000	3,550
Willard	20,079	1869	1870	7,000	25,000	1,350
Wyman	14,347	1871	1871 1886 addition	4,500	5,000	555
				$356,300	$1,444,000	$92,091

CITY BUILDINGS.

	Feet of Land.	Purchase of Land.	Erection of Building.	Valuation of Land.	Valuation of Building	Valuation of Furniture.
City Hall	47,878	1888	1888	$72,000	$200,000	$29,800
Brattle Sq. Bldg.	16,153	1873	1874	16,000	60,000	2,500
Central Sq. Bldg.	13,028	1872	1873	10,500	50,000	2,436
Station 3	4,220	1862	1870	2,100	20,000	800
Ward 5 Bldg.	6,316	1872	1873	3,700	5,300	300
				$104,300	$335,300	$35,836

SCHOOLHOUSES — CARE AND REPAIRS.

Schools.	Fuel.	Light.	Repairs.	Supplies.	Extra Labor.	Janitor.	Totals.
Agassiz	$342 35	$12 30	$284 99	$29 50	$4 00	$625 71	$1,298 85
Allston	403 25	257 92	2,189 82	49 85	30 50	677 85	3,609 19
Boardman	182 20	8 40	354 29	8 38	.....	625 71	1,178 98
Corlett	79 07	.....	41 41	6 75	.....	260 71	387 94
Cushing	85 77	.....	72 97	20 05	.....	260 71	439 50
Dunster	119 75	.....	291 20	.....	.....	417 14	828 09
Ellis	565 00	5 70	789 81	75	.....	834 28	2,195 54
Felton	273 84	8 90	1,630 12	81 22	.....	417 14	2,411 22
Gannett	243 15	13 80	96 13	46 65	4 00	521 42	925 15
Gannett (old)	88 00	70	27 00	.....	.....	312 86	428 56
Gore	304 14	16 80	798 95	78 55	.....	782 14	1,980 58
Harvard	842 75	10 81	592 48	20 73	.....	1,199 28	2,666 05
High	1,287 31	709 20	1,620 03	199 01	678 50	1,800 00 808 21	7,102 26
Holmes	88 45	16 60	189 50	1 47	.....	365 00	661 02
Lassell	142 80	.....	250 23	6 10	.....	417 14	816 27
Latin	1,534 87	442 69	727 13	139 41	286 00	1,800 00 1,042 85	5,972 95
Lowell	141 25	5 00	44 72	2 40	.....	365 00	558 37
Merrill	486 75	2 70	378 11	212 21	.....	765 00	1,844 77
Morse	1,130 80	20 80	469 04	49 52	.....	1,147 14	2,817 30
Otis	224 70	21 20	641 58	25 85	.....	625 71	1,539 04
Parker	245 25	7 20	134 04	75	.....	521 42	908 66
Peabody	666 55	17 44	883 99	13 65	.....	1,147 14	2,728 77
Putnam	664 13	223 16	234 20	25 72	.....	1,147 14	2,294 35
Reed	126 45	.....	225 64	4 75	.....	417 14	773 98
Rindge, M. T.	788 08	282 20	420 41	163 11	192 71	1,303 57 996 16	4,146 24
Riverside	4 60	.....	121 06	16 20	2 50	391 07	535 43
Roberts	777 40	7 20	471 88	43 08	.....	834 28	2,133 84
Russell	477 90	19 40	167 88	1 75	.....	834 28	1,501 21
Sargent	166 65	14 30	44 49	75	.....	312 86	539 05
Shepard	330 50	85 66	121 31	77 78	.....	782 14	1,397 39
Sleeper	404 95	40	394 64	18 25	.....	625 71	1,443 95
Stearns	162 05	23 10	120 82	3 68	.....	367 07	676 72
Tarbell	193 00	1 90	312 37	3 75	.....	389 00	900 02
Taylor	544 90	9 00	1,452 61	7 48	18 00	782 14	2,814 13
Thorndike	370 50	65 20	240 97	4 02	.....	730 00	1,410 69
Washington	288 00	55 50	70 20	32 85	.....	782 14	1,228 69
Webster	714 70	148 32	681 56	87 68	.....	1,042 85	2,675 11
Wellington	553 20	30 40	1,173 51	31 85	.....	782 14	2,571 10
Willard	242 10	17 80	198 28	13 70	.....	782 14	1,254 02
Wyman	207 25	.....	210 71	50	.....	521 42	939 88
All Schools	.....	175 52	664 31	1,319 19	1,017 50	417 14	3,593 66
	$16,494 36	$2,737 22	$19,834 39	$2,848 89	$2,233 71	$31,979 95	$76,128 52

INSPECTION OF BUILDINGS.

On April 2, 1901, the Board of Aldermen ordered that the sum of six hundred dollars be transferred from the appropriation for Contingent Fund to that of Public Property, Incidental Expenses, to enable the Superintendent of Public Buildings to employ an additional assistant for the purpose of making a more thorough inspection of certain classes of buildings, as required by Sections 44, 45 and 58, of Chapter 481, of the Legislative Acts of the Commonwealth, for the year 1894.

Application was made to the Civil Service Commission for a certified list, from which an appointment could be made; and, after an examination of applicants by that Board, a list of three names was submitted to this department, from which the appointment was made.

Mr. Leonard D. Garfield, who had held the position of Superintendent of Harvard College buildings for a number of years, and who had resigned from that position, was the first name on the list, and was appointed Assistant Inspector of Buildings. He began his duties on June 1, and his thorough and conscientious work thus far is convincing proof that his selection to the position was a wise and judicious one. Constant changes in mode of construction of buildings and requirements of the building ordinance necessitates constant vigilance on the part of the Inspector, for his position is one in which the public looks to for its protection of life and limb in the construction of private buildings.

The following table gives the number of inspections made by this department the past year :—

Inspections	3,855
Inspection of chimneys	279
Inspection of buildings to be moved	7
Foundations condemned	5
Foundations ordered relaid	9
Defective conductors and gutters	28
Dangerous chimneys	29
Buildings too near adjoining lot	5
Buildings in a dangerous condition	3
Defective construction in fire places	13
Building without a permit	18
Permits cancelled	2
Changes ordered in furnace and steam pipes	32
Changes ordered in plans submitted	35
Plans rejected	5
Notices served on violators of building ordinance	45

The following table shows the number of permits granted in each Ward and the use for which they are intended :—

Buildings.	WARDS.				
	1	2	3	4	5
Additions	36	39	15	37	48
Alterations and repairs	26	22	10	22	12
Carriage houses	1	3	3	5	2
Chimneys	1	2	4	1	1
Dwellings and stores	..	5	..	2	..
Dwellings	24	46	3	14	29
Factories	..	1	2	..	..
Foundations	5	31	3	7	5
Heating apparatus	6	6	1	4	1
Stables	1	2	2	..	1
Stores and offices	4	3	1	1	4
Storehouses	2	7	3	3	3
Miscellaneous	18	7	3	10	7
Totals	124	174	50	106	113

Of the foregoing permits 537 were issued for wooden structures and 30 for brick and stone, making a total of 567.

BRICK BUILDINGS.

Additions	5	*Brought forward*	22
Alterations and repairs	3	Factory	1
Apartment houses	4	Lodge	1
Apartments and stores	3	Office and storehouse	1
Block (6 houses)	1	Parochial school	1
Church	1	Public school	1
Dormitories	2	Power station	1
Dwellings	2	Stores	2
Engine House	1		
Carried forward	22	Total	30

Number of permits granted for each month for the years 1900 and 1901:—

	1900.	1901.
December	25	24
January	19	24
February	20	20
March	30	53
April	53	62
May	49	72
June	52	59
July	49	55
August	46	59
September	32	49
October	49	50
November	31	40
Totals	455	567

COST OF BUILDINGS ERECTED IN 1901.

	Ward 1.		Ward 2.		Ward 3.		Ward 4.		Ward 5.		Totals.	
	New.	Additions and Repairs.	New.	Additions and Repairs.	New.	Additions and Repairs	New.	Additions and Repairs.	New.	Additions and Repairs.	New.	Additions and Repairs.
December ..	$5,400	$400	$1,100	$400	$25,000	.....	$4,500	$1,000	$7,600	$150	$43.600	$1,950
January.....	1,200	200	1,050	2,300	.....	$1,100	.....	4,350	.....	640	2,250	8,590
February ...	3.000	1,400	16,220	250	16,000	200	850	1,725	4,500	200	40,570	3,775
March	1,500	13,150	49,400	2,550	125.000	200	30,000	1,380	5,000	6,635	210,900	23,915
April.....	86,150	11,100	55,950	3,310	6,000	2,000	72,150	1,050	82,500	4,000	302,750	21,460
May.	22,500	2,325	99,550	9,675	7,500	2,450	99,300	1,900	29,750	1,135	258,600	17,485
June.....	31.300	10,825	76,400	1,250	.....	1,000	25,000	10,455	8,500	7,550	141.200	31,080
July.....	8,900	27,700	45,400	1,700	.....	400	54,525	7,075	5,100	850	113,925	37,725
August.....	18,100	39,025	28,700	4,800	.....	4,000	4,750	4,775	28,000	3,325	79,550	55,925
September..	3,075	2,335	29,000	10,685	175	1,465	10,000	5,560	5,700	4,850	47,950	24,895
October	80,900	3,075	8,300	2,050	1,000	1 050	50	4,150	10,750	1,900	101,000	12,225
November ..	16,600	13,600	31,800	1,525	1,000	5,200	5,800	4,500	2,815	230	58,015	25,055
Totals....	$278,625	$125,135	$442,870	$40,495	$181,675	$19,065	$306,925	$47,920	$190,215	$31,465	$1,400,310	$264,080

INSPECTION OF PLUMBING.

This branch of the department is under the charge of Mr. C. H. M. Hunnewell, who has had the general supervision of this work for the past five years. Much of his time is required in a personal examination of the work while it is being placed in a building, and all work is required to be exposed until after an examination and proper tests are made.

The department received many complaints of defective work done by irresponsible mechanics, but under the present law it is very hard to secure evidence to convict, unless the offender is detected in the work. Several instances have been discovered and the offenders severely punished. One case can be sighted where the work done was of so dangerous a character that the department felt compelled to give the full penalty for such offences, which was that his master's license was revoked and he was forbidden to carry on or work at the business of plumbing for the period of one year. The following is Mr. Hunnewell's report to this department for the year ending November 30, 1901 : —

Applications received and permits granted	698
Inspections and tests	1,736
Defective work and violations of the plumbing ordinance	37
Permits cancelled	7
Master plumbers registered	40
Master plumbers holding certificates	33
Journeymen plumbers holding certificates	59
Master plumbers holding licenses	30
Journeymen plumbers holding licenses	36
Master plumbers granted new licenses	1
Journeymen plumbers granted new licenses	11
Master plumbers licenses cancelled	8
Master plumbers licenses revoked	1
Journeymen plumbers licenses cancelled	20
Master plumbers licenses renewed	37
Journeymen plumbers licenses renewed	47
Cash received from new licenses and renewals	$49 50

In conclusion I desire to say that it is a pleasure to recall the cordial relations existing between the various committees and this department. To the Committee on Public Property, the members of which have been ever ready to assist and advise in all matters pertaining to the work of this department, and to His Honor, the Mayor, I desire to express my sincere appreciation for the valuable assistance rendered me during the past year.

Respectfully submitted,

WM. H. GRAY,
Superintendent of Public Buildings.

REPORT OF THE TRUSTEES OF THE CAMBRIDGE PUBLIC LIBRARY

To the Honorable, the City Council: —

The trustees of the Cambridge Public Library respectfully submit their forty-fourth annual report, covering the year ending November 30, 1901. The details of the year's service will be found in the accompanying report of the librarian. The work already in progress on the building proceeds satisfactorily, and every day vindicates the expediency of the additional appropriations made for that purpose. The trustees would, however, call your attention to the fact, easily seen by comparing the statistics, that the amount hitherto appropriated for the ordinary work of the library remains about the same from year to year, although there is a steady increase in the quantity of this work as well as in the population of the city. It must cause no surprise therefore, if hereafter some additional appropriations should be requested, not for particular buildings or branches, but to keep pace with growth and general progress of the community.

In regard to additional branches, your attention is called to the fact that the original action in regard to both the East Cambridge and North Cambridge branches was taken by the city government without reference to the trustees. While in both cases the trustees have fully approved of the general plan and of the particular directions in which it has thus far been applied, they wish to emphasize the fact that nothing requires more careful deliberation and consultation than the creation of new branches; and that those which may follow should be carefully planned, after full consultation with the trustees, and gradually introduced. This gradual addition has been carefully pursued by the trustees in regard to delivery stations, which have in consequence been steadily extended and thus far successful. The same caution is still more required in dealing with branch libraries, as involving far greater expense.

A comparatively small number of branch libraries, each well equipped and liberally endowed, will be more useful than a much larger number insufficiently provided for. So far the trustees have reason to

congratulate themselves on the steady improvement in the East Cambridge branch; but this improvement has been largely due to the fact that this branch, as being the first experiment, could be carefully worked out by itself and the best methods tried. It may be well to add that the recommendation of the librarian as to opening it on Sunday has been adopted by the trustees and has already gone into effect.

Respectfully submitted,

T. W. HIGGINSON,
WILLIAM J. ROLFE,
For the Trustees.

REPORT OF THE LIBRARIAN

CAMBRIDGE, MASS., November 26, 1901.

To the Trustees of the Cambridge Public Library: —

GENTLEMEN: — A year ago, the two most urgent subjects to which I called your attention were the crowded condition of the stack and the unsatisfactory quarters of the East Cambridge branch. The appropriation recently made by the City Council will supply within a few months the much needed addition to the stack wing of our building, and the removal of the branch library to a larger and more accessible room has already been accomplished. The former ward room on Fourth street, which has now been given for our use, was not available when the branch was first started, and the opportunity to obtain it was gladly improved. This room is attractive in appearance, and in all such essential particulars as location, floor space, light and ventilation, is much superior to the old quarters. Mr. Gray, the superintendent of public buildings, prepared the ward room very satisfactorily for our occupancy, with the money appropriated for this purpose by the City Council. A new floor is needed, however, and I recommend that this be laid during the coming summer.

It has been found advisable to make some slight changes in the hours of opening the East Cambridge branch, and it is now open from 10 A. M. to 1 P. M., from 3 to 5.30 P. M., and from 6 30 to 9 P. M. I suggest that you consider the feasibility of opening the branch for readers on Sunday, at least during the winter months, for I feel confident the small additional expense would be justified by the use that would be made of the privilege. At the outset, the Sunday hours might be from 2 to 6 P. M.; and, should the patronage warrant, evening hours might follow.

The painting of the walls and parts of the ironwork of the stack, recommended in my last report, was postponed, chiefly on account of the approaching extension of the building. It would be well to have this work done simultaneously with the painting of the new part of the stack. I suggest, also, that in your estimates for the coming year you include the cost of resetting the stone steps at the main entrance of the library.

The steps have long been in an unsatisfactory condition, and the repairs that have been made were necessarily of a temporary nature.

The changes in the library staff during the past year have been caused by the resignations of Miss Callender and Miss Hallett, and also of the two evening attendants, Mr. Taylor and Mr. Fearns. The vacancies in the regular staff have been filled by the election of Miss Effie L. Chapman, a Radcliffe graduate of the present year, and Miss L. Edna Brooks. Miss Brooks will begin her term of service December first. The present evening attendants are Mr. Howard B. Wilson and Mr. Chester A. Garfield. In accordance with a recent vote of your board, I have engaged as an attendant for Sunday afternoons Miss Flora Lilienthal, who will take up the work which Miss Hallett has done so acceptably during the past seven years. The position of carrier has been filled, after a long but unavoidable delay, by the election of Mr. Gilbert Davoren at a fixed salary, which is to cover all services that he may be required to perform.

The abolition of the age limit, recommended in my last report, was at once put into effect by vote of the board of trustees. Many children, particularly between the ages of nine and thirteen, have taken advantage of the privilege of obtaining borrowers' cards of their own. The results have been entirely satisfactory and have confirmed my opinion that the age limit, in this library at least, had become altogether unnecessary.

A new registration of borrowers is always unwelcome, particularly to the public, and for this reason it is not made when it can well be avoided. But the freedom with which the privileges of our library are extended to those who are residents of Cambridge for very brief periods, including many students in the summer schools, has brought into use many borrowers' cards which it is now desirable to cancel. I think it will be advisable to begin a fresh registration next summer.

The transfer of the local delivery work to the small room designed for the purpose at the end of the new stack will enable us to place in the children's room most, if not all, of the juvenile books intended for circulation. These books should be charged by an attendant in the room, and the relief that would thereby be afforded the general delivery desk would be especially welcome to the adult patrons of the library. An attendant who gives her entire time to the children, and who makes herself thoroughly acquainted with the books that are placed in their hands, is now a necessity in every library which pretends to make special provision for children. There is no member of our present staff who can make this her sole duty, and for this reason I think you may well consider the appointment of a new assistant for the purpose. The sole drawback to the plan as outlined is the limited amount of space in our children's room, but it will be possible by a rearrangement of the tables to make the

room reasonably well adapted to our purposes. A probable result of such an attempt to enlarge the scope of the children's room will be the necessity of erecting a glass partition between this room and the main reading room. This suggestion I have already made in a previous report.

We have begun the enlargement of our meagre library of music by the addition of a small number of opera scores, and they have been in almost constant circulation. This department of the library has been too long neglected, and now that we are to have more room we should devote at least a small sum each year to its development. Within the next two or three years I hope it may be possible to make considerable additions to our collection of photographs, which have now become so important a feature of the educational work of the library.

An examination of the statistics of the work of the year shows an increase of 3,113 in the circulation from the main library. The schools have failed to keep up to the figures of last year, and the number of books sent to the local stations has also fallen off. The latter decrease, however, is more than counterbalanced by the substantial increase at the East Cambridge branch and by the larger number of books taken out through the deposit collections, despite the fact that the record of the use made of the books in these collections is necessarily imperfect. The gain in circulation through the East Cambridge branch has been made in each quarter of the year, although a large part of the total increase has taken place since the removal to the present location.

The most valuable gift of the year has been received from Mr. Nathaniel Cushing Nash, of Cambridge, and consists of a costly collection of art works, of which etchings form the most important part. Some of the volumes have been bound and placed on the shelves, and the remainder will be bound during the coming year. The library has received this month from Dr. Augustus P. Clarke, trustee under the will of Lucius R. Paige, a collection of manuscripts, letters, etc., chiefly relative to the history of Cambridge, and bequeathed to the library by Mr. Paige. Mrs. James Barr Ames has continued to give the publications of the Egypt exploration fund. The Hannah Winthrop chapter of the Daughters of the American Revolution has loaned the library for an indefinite period a set of the lineage books of the society, and these have been placed in our genealogical library. We are indebted, as usual, to the Harvard College library for lists of its accessions and for various duplicate volumes.

Respectfully submittted,

WILLIAM L. R. GIFFORD,
Librarian.

APPENDIX I

GENERAL STATISTICS.

Total number of volumes in the library	60,759
Volumes added during 1901	3,796
Volumes condemned	1,883
Duplicates exchanged	86
Volumes destroyed on account of contagious diseases	32
Volumes lost	54
Volumes bound	3,018
Postal cards sent for books overdue	5,492

CIRCULATION.

	Central.	Local, including branch library.	Schools.	Total.
First Quarter	34,269	12,292	3,502	50,063
Second Quarter	37,859	13,243	3,000	54,102
Third Quarter	26,818	11,022	....	37,840
Fourth Quarter	30,542	11,305	2,470	44,317
Total	129,488	47,862	8,972	186,322

Average per day (Central library)	426
Average per day (Local stations exclusively)	148
Average per day (Schools)	264
Largest issue (Central library), Feb. 23	1,022
Largest issue (Local stations), March 30	281
Largest issue (Schools), Dec. 7	468
Smallest issue (Central library), June 6	191
Smallest issue (Local stations), Oct. 14	63
Teachers' books drawn directly from library	2,868

CLASSIFIED CIRCULATION (MAIN LIBRARY).

Classes.	Biography.	Current magazines.	Fiction, including juvenile fiction.	Foreign literature.	General works.	History.	Literature.	Seience and arts.	Travels.	Total.
Circulation	4,786	4,481	89,612	2,520	1,316	4,408	11,066	7,687	3,612	129,488
Per cent	.037	.035	.691	.02	.01	.034	.085	.06	.028	

SCHOOL DELIVERY.

Name of School.	Allston.	Ellis	Harvard.	Morse.	Peabody.	Putnam	Roberts.	Russell.	Shepard	Sleeper.	Taylor.	Thorndike	Washington	Webster.	Wellington.	Vacation Schools	Total.
Books delivered.	643	561	525	225	327	1,618	844	1,063	316	50	486	949	110	238	732	285	8,972

LOCAL DELIVERY.

Stations	Whalen.	Hunnewell.	Phillips.	Yerxa.	East Cambridge.	Gove	Dow.	Prospect Union.	Deposit collections.	East Cambridge branch.	Total.
Books delivered...	1,697	9,441	1,260	1,055	855	3,565	2,901	2,025	6,494	18,569	47,862

ADDITIONS (INCLUDING REPLACED BOOKS).

Source	City appropriation.	Citizens' subscription fund.	Cummings fund.	Fay fund	Gifts.	By exchange.	Total.
Books.....	3,474	16	10	4	286	6	3,796

APPENDIX II

AMOUNTS RECEIVED BY THE LIBRARIAN AND DEPOSITED WITH THE CITY TREASURER.

	Fines.	Catalogues.	Duplicates.	Paper stock, etc.	Total.
December-February	$173 77	.....	.....	$6 09	$179 86
March-May	171 13	$4 50	$4 00	5 87	185 50
June-August	127 39	3 30	.....	2 31	133 00
September-November	126 96	2 25	....	2 10	131 31
Total	$599 25	$10 05	$4 00	$16 37	$629 67

CITY APPROPRIATION.

Appropriation	$19,000 00

EXPENDITURES.

Binding	$1,181 81	
Books and periodicals	4,795 38	
Bulletin	342 19	
Carrier	534 10	
Fuel	474 50	
Furniture	69 65	
Incidentals	243 54	
Insurance	108 00	
Lighting	1,022 90	
Local stations	418 73	
Printing, postage, and stationery	506 52	
Repairs	193 98	
Salaries	9,107 45	
		18,998 75
Amount unexpended		$1 25

SPECIAL APPROPRIATION FOR EAST CAMBRIDGE BRANCH LIBRARY.

Appropriation	$1,320 00

EXPENDITURES.

Binding	$39 40	
Books and periodicals	262 32	
Incidentals	56 32	
Lighting	37 00	
Rent	100 00	
Salaries	824 81	
		1,319 85
Amount unexpended		$0 15

FUNDS OF THE TRUSTEES.

Citizens' Subscription Fund.

Balance, December 17, 1900		$68 30
Interest on bonds		220 00
Cheque stamps redeemed		3 00
		$291 30

EXPENDITURES.

B. C. Darling	$17 50	
Library Art Club	5 00	
Little, Brown & Co.	38 50	
Geo. H. Lyman, Collector	5 00	
Society for Psychical Research	5 00	
John Wanamaker	58 00	
		$129 00
Balance on hand, December 11, 1901		$162 30

Cummings Fund.

Balance, December 17, 1900		$14 28
Interest on bond		80 00
		$94 28

EXPENDITURES.

American Architect and Building News Company	$6 50	
Little, Brown & Co.	22 50	
Geo. E. Littlefield	23 85	
		$52 85
Balance on hand, December 11, 1901		$41 43

Fay Fund.

Balance, December 17, 1900		$0 42
Interest on bond		35 00
		$35 42

EXPENDITURES.

Burrows Brothers Company	$3 50	
Sogo Matsumoto	7 80	
		$11 30
Balance on hand, December 11, 1901		$24 12

APPENDIX III

GIFTS.

		V.	P.
Abbot Public Library, Marblehead			1
Abbott, Edward	manuscript	1	4
Acker, F.		1	
Adams, John P.	cutlass, portrait, roster		
Adams Nervine Asylum, Jamaica Plain			1
Adriance Memorial Library, Poughkeepsie, N. Y.			1
Aguilar Free Library Society, New York, N. Y.			1
American Congregational Association, Boston			1
Ames, Mrs. James Barr		10	
Amherst College			1
Ancient and Honorable Artillery Company, Boston		1	1
Andover Theological Seminary,			1
Apprentices' Library Company, Philadelphia, Pa.			1
Balch, Thomas Willing, Philadelphia, Pa.		2	
Bangor (Maine) Public Library			1
Barnes, Albert M.			1
Barton, William E., Oak Park, Ill.		1	
Batchelder, Isabel, Boston		2	
Belmont Public Library			1
Birmingham (England) Free Libraries			2
Boston, City of		1	
Boston Athenæum		1	
Boston Public Library		1	
Boston Transit Commission		1	
Boston University			1
Bostonian Society		1	1
Bowdoin College Library, Brunswick, Maine			2
Brandon, Edward J., City Clerk, Cambridge		4	
Brockton Public Library			1
Brookline Public Library			4
Brown, David H., West Medford		1	
Brown University, Providence, R. I.		1	
Bryn Mawr (Pa.) College			1
Bunker Hill Monument Association, Boston		1	
Burlington (Vt.) Free Public Library			1
Cambridge, City of		3	4
Cambridge: —			
Associated Charities,			1
East End Christian Union			1
Episcopal Theological School			2
First Church (Congregational)			1
Library Hall Association			1
Post 56, G. A. R.		2	
Social Union			1
Candage, R. G. F., Brookline		1	
Carnegie Library, Atlanta, Ga.			1
Carnegie Library, Pittsburg, Pa.			1
Channing, Walter, Brookline			1
Chicago (Ill.) Public Library			1
Choate, Joseph H., New York, N. Y.		1	
Cincinnati (Ohio) Public Library			1
Clark University, Worcester			4
Cleveland (Ohio) Public Library			1
Columbia University, New York, N. Y.			1
Concord (N. H.) Public Library			1

		V.	P.
Cone, Joe		1	
Connecticut. Bureau of Labor Statistics		1	
Cumston, Charles Greene, Boston			13
Cutter, Frederick S.			1
Dana, Richard Henry			2
Dartmouth College, Hanover, N. H.			1
Davis, Andrew McFarland		2	1
Dayton (Ohio) Public Library and Museum			1
District of Columbia Public Library, Washington			1
Dover (N. H.) Public Library			1
Dresser, Horatio W.		6	
Drexel Institute, Philadelphia, Pa.			1
Dudley, Sanford H.		1	
Eau Claire (Wis.) Public Library			1
Enoch Pratt Free Library, Baltimore, Md.			1
Erie (Pa.) Public Library			1
Fidelity and Casualty Co., New York, N. Y.			1
Field, Marshall, Chicago, Ill.		2	
First Church of Christ, Scientist, Boston		1	
Fitchburg Public Library			1
Fitz Public Library, Chelsea			1
Fletcher Free Library, Burlington, Vt.			1
Forbes Library, Northampton			1
Frye, Alexis Everett, Cal.		1	
Gifford, William L. R.		5	
Girard College, Philadelphia, Pa.			1
Green, Samuel A , Boston	portrait	1	1
Green, Samuel Swett, Worcester		3	
Haile, Mrs. William H., and family		1	
Hanson, Charles Lane		1	
Harris, Charlotte M		2	
Hartford (Conn.) Public Library			1
Harvard University Library		6	4
Haverford (Pa.) College			1
Haverhill Public Library			1
Higginson, Thomas Wentworth		5	40
Hildreth, John L.		1	
Hoar, George F., Washington, D. C.		1	
Holy Cross College, Worcester			2
Home Science Publishing Co., Boston		1	
Hubbard, George Henry, Springfield		1	
Indian Rights Association, Philadelphia, Pa.			1
Iowa State Normal School, Cedar Falls, Iowa			1
John Crerar Library, Chicago, Ill.			1
Johns Hopkins University, Baltimore, Md.			2
Julien, Matthew C., New Bedford			2
Lake Mohonk (N. Y.) Conference on International Arbitration			1
Lancaster Town Library			1
Leicester Public Library			1
Leland Stanford Jr. University, Palo Alto, Cal.			1
Library Association of Portland, Oregon			1
Lochman, Harriet D.		1	
Los Angeles (Cal.) Public Library			2
Lynn, City of		1	
Lynn Historical Society		1	
Lynn Public Library			1
McCall, Samuel W , Washington, D. C.		1	
McCarthy, D. A.		1	
McKenzie, Alexander			1
McKenzie, Mrs. W. S.		1	
Malden Public Library			1
Manchester (N. H.) City Library			1

	V.	P.
Marvin, William J.	5	
Massachusetts, Commonwealth of	32	3
Massachusetts Civil Service Commission	1	
Massachusetts College of Pharmacy, Boston		1
Massachusetts Institute of Technology, Boston		2
Massachusetts Society of Sons of the American Revolution	1	
Massachusetts State Board of Charity	1	
Massachusetts State Federation of Women's Clubs		1
Massachusetts Total Abstinence Society, Boston		2
Medford Public Library		2
Middlesex County	1	
Milwaukee (Wis.) Public Library		1
Minneapolis (Minn.) Public Library		1
Moore, Charles S.		1
Mount Auburn Cemetery		1
Mount Holyoke College, South Hadley		1
Murray, Thomas Hamilton	1	
Museum of Comparative Zoology	2	2
Nash, Nathaniel Cushing	8	
National Civil Service Reform League	1	
National Educational Association	1	
New Bedford Free Public Library		1
New York Civil Service Reform Association		3
New York Free Circulating Library		1
New York Public Library	1	
New York State Library, Albany, N. Y.	5	
Newark (N. Y.) Free Public Library		1
Newton Free Library		2
North Adams Public Library		1
North Brookfield Public Library		1
Northampton Public Library		1
Northfield Seminary, East Northfield		1
Norton, Charles Eliot	8	
Oberlin (Ohio) College		3
Ohio State University, Columbus, Ohio		1
O'Neil, Desmond, Boston		1
Paine, Robert Treat, Boston		1
Palfrey, Sara H.	1	
Parlin Memorial Library, Everett		1
Paterson (N. J.) Free Public Library		2
Peabody Museum	1	
Peoria (Ill.) Public Library		2
Piper, William Taggard	5	
Portland (Maine) Public Library		2
Pratt Institute Free Library, Brooklyn, N. Y.		1
Preble, Wallace	5	
Princeton (N. J.) University		1
Providence, (R. I.) Athenæum		1
Providence (R. I.) Public Library		1
Providence (R. I.) Record Commissioners	1	
Radcliffe College		2
Redwood Library and Athenæum, Newport, R. I.		1
Reed, George B.	1	
Richards, L. S.	1	
Robbins Library, Arlington		1
Rolfe, William J.	3	
Ross, Worth G.	4	
Russell. Etta Lois	1	54
St. Louis (Mo.) Mercantile Library Association		1
Salem Public Library		2
San Francisco (Cal.) Free Public Library		1
Scranton Memorial Library, Madison, Conn.		1

		V.	P.
Scranton (Pa.) Public Library			1
Seward, George F., New York, N. Y.			3
Sheldon, J. M. A., Boston		1	
Shields, C. W., New York, N. Y.		1	
Silas Bronson Library, Waterbury, Conn.			1
Skinner, Mrs. Henrietta C. D., Detroit, Mich.		2	1
Smith, Mrs. Anna B.		1	
Smith, Winifred B.		1	
Smith College, Northampton			1
Smithsonian Institution, Washington, D. C.		9	
Soldiers' Home in Massachusetts, Chelsea			2
Somerville Public Library			1
Southbridge Public Library			1
Spaulding, Mrs. Ada P., Boston			1
Stratton Free Library, West Swanzey, N. H.		1	
Swan, C. H., Jr.		1	
Syracuse (N. Y.) Central Library			1
Taunton Public Library			1
Thomas Crane Public Library, Quincy			1
Thomson, John, Philadelphia, Pa.			1
Tobey, Rufus B., Boston	2 Confederate bonds		
Trinity College, Hartford, Conn.			3
Tufts College, Medford			2
Tufts Library, Weymouth			2
Tulane University, New Orleans, La.			1
United States: —			
American Ethnology, Bureau of		1	
Education, Bureau of		2	
Geographic Names, Board on		1	1
Geological Survey		1	
Interstate Commerce Commission		2	
Labor, Department of		7	
Library of Congress		5	1
Navy Department		1	3
Patent Office		7	
Superintendent of Documents		2	
Treasury Department		7	
War Department		22	1
University of California, Berkeley, Cal.			1
University of Chicago, Ill.			1
University of Michigan, Ann Arbor, Mich.			1
University of Pennsylvania, Philadelphia, Pa.			1
University of Wisconsin, Madison, Wis.			1
Vassar College, Poughkeepsie, N. Y.			1
Villa Franca, Richard, New York, N. Y.		1	
Waitt, Andrew S.		3	
Watertown Free Public Library			1
Webber, A. Carter		4	1
Wellesley College, Wellesley			1
Wells College, Aurora, N. Y.			1
Wesleyan University, Middletown, Conn.			2
Western Reserve University, Cleveland, Ohio			1
Williams College, Williamstown			1
Wilmington (Del.) Institute			1
Winthrop Public Library			1
Wisconsin State Historical Society, Madison, Wis.		1	1
Woburn Public Library			1
Woman's College, Baltimore, Md.			1
Woodman, Cyrus, Estate of		20	
Worcester Academy, Worcester			1
Yale University, New Haven, Conn.		1	2
Young, Edward James, Newton		1	

Bulletins, or similar publications, have been received from the following libraries:—

Boston Public Library
Brockton Public Library
Brookline Public Library
Brooklyn (N. Y.) Public Library
Cincinnati (Ohio) Public Library
Dover (N. H.) Public Library
Fitchburg Public Library
Hartford (Conn) Public Library
Iowa Library Commission, Des Moines, Iowa
Iowa Masonic Library, Cedar Rapids, Iowa
Lawrence Public Library
Library Association of Portland, Ore.
Lowell City Library
Madison (Wis.) Free Library
Malden Public Library
Manchester (N. H.) City Library
Mechanics' Institute Library, San Francisco, Cal.
Medford Public Library
New Bedford Free Public Library
New Haven (Conn.) Free Public Library
New York Public Library
Osterhout Free Library, Wilkes-Barré, Pa.
Paterson (N. J.) Free Public Library
Peabody Institute Library, Danvers
Philadelphia (Pa) Free Library
Pratt Institute Free Library, Brooklyn, N. Y.
Providence (R. I.) Libraries
Salem Public Library
San Francisco (Cal.) Free Public Library
Silas Bronson Library, Waterbury, Conn.
Somerville Public Library
Springfield City Library
Tacoma (Wash) Public Library
Taunton Public Library
Tufts Library, Weymouth
Warren County Library, Monmouth, Ill.
Worcester Free Public Library.

ANNUAL REPORT OF THE CHIEF ENGINEER OF THE FIRE DEPARTMENT

CHIEF ENGINEER'S OFFICE, CITY HALL,
CAMBRIDGE, MASS., December, 1901.

To the Honorable, the City Council:—

GENTLEMEN:—In compliance with the provisions of Section 6 of the Ordinance governing the Fire Department, I have the honor to submit herewith a report for the fiscal year ending November 30, 1901, being my twenty-third annual report.

MANUAL FORCE.

The full force of the department, as provided by ordinance, is one hundred and twenty-five officers and men. At the present time it consists of a chief engineer, an assistant chief engineer, a driver for the chief engineer and one hundred and twenty officers and men, divided into twelve companies, viz.: Seven steam engine companies, two chemical engine companies and three ladder companies; fifty seven are permanently employed and sixty-six are call men, there being two vacancies in the call force.

During the year three cases of breach of discipline have occurred, one in the permanent and two in the call force, and after a careful and thorough investigation of each case by His Honor, the Mayor, he recommended that they be discharged, which was done.

APPARATUS.

Early in the year Engine No. 1 was sent to the repair shop and furnished with a new boiler and its other parts thoroughly repaired and painted. A set of new wheels were bought for Engine No. 4; and a three-horse pole with other necessary appliances for a three-horse hitch, principally for winter use, for Chemical Engine No. 2.

The apparatus in the service of the department, which consists of eight steam engines, two chemical engines, five hose wagons, two hose carriages, three ladder carriages, five fuel or exercise wagons, and three chief's wagons have had the customary repairs made upon them during

the year, and are now in good working condition, with the exceptions of Hose Carriage No. 4 and Ladder Carriage No. 2.

In accordance with my previous recommendations the City Council authorized the purchase of a hose wagon for Engine Co. No. 4, and a ladder carriage for Ladder Co. No. 2, which were ordered and will soon be delivered.

HOSE.

Since my last report 650 feet of two and one-half inch cotton hose has been condemned, and 400 feet purchased. The amount of serviceable hose now in the service is 13,250 feet. There is also 750 feet of one-inch rubber hose, and 250 feet of two-inch cotton and linen hose in use on chemical engines.

It will be necessary the coming year to purchase a quantity of hose to replace that which is perpetually giving out, owing to the hard usage it gets at fires.

HORSES.

During the year four horses were bought, and four horses disposed of because of their having become unfit for fire department service. The total number of horses now in the service of this department is thirty-seven, some of which have grown old in the service, and will soon have to be exchanged for younger and more active horses.

HOUSES.

The houses of the department are generally in good condition and well arranged to suit the requirements of the service, with the exception of Ladder House No. 1, which is poorly located and inconvenient, and in my opinion a new location should be selected.

I again desire to call attention to the need of better fire protection in Ward 5 and part of Ward 1. That section of the City has grown considerable within the last few years, and should have better protection in case of fire.

This matter has received some attention by the present City government and it is hoped will be favorably considered by the City government for 1902.

APPROPRIATION AND EXPENDITURES.

The appropriation for the maintenance of this department for the fiscal year ending November 30th was $93,250; the receipts $100, and the expenditures $91,120.04. The unexpended balance was $2,129.96.

FIRES AND ALARMS.

The total number of fires and alarms for fires for the year, from all causes, was 291, the number of bell alarms being 205 and the number of still alarms 86.

A portion of this department rendered assistance at fires out of the City on three occasions, as follows: —

On January 5th, Boston (Charlestown District); April 30, Belmont, and October 24th, Somerville.

The total losses, as near as could be ascertained, together with the amount of insurance and the amount of insurance paid, were as follows:—

	Losses.	Insurance.	Insurance Paid.
On Buildings	$39,878 00	$384,916 00	$38,282 00
On Contents	36,560 00	142,472 00	33,655 00
Totals	$76,438 00	$527,388 00	$71,937 00

DECEASE OF MEMBERS.

Captain Thomas L. Hunter, a permanent member, died on January 29; George P. Banister, a call member, died on May 7; Assistant Engineman Lorenzo H. Dale, a permanent member, who had been connected with the department about forty years, died on August 27; John H. Robbins, formerly a call member, and on the pension roll, died November 27.

DISCHARGED.

William H. Murray, a call member, December 16, at his own request.

Robert J. Ballantine, a call member, January 12, at his own request.

James P. O'Neill, a permanent member, March 12, for violation of Article 20 of the Rules and Regulations.

William H. Hanson and William H. Buchanan, call members, October 15, for violation of Article 20 of the Rules and Regulations.

Thomas A. Montgomery, a call member, November 30, at his own request.

APPOINTMENTS.

Joseph A. Lincoln and William Reilly were appointed call members December 15; Henry O'Brien, appointed a permanent member February 19; Lieutenant Cutler L. Vose, appointed captain February 20; Angus A. McDonald, appointed lieutenant February 27; Frederick A. Reed and

Edward E. Gaughan were appointed call members March 26; Walter E. Chapman, appointed a permanent member March 28; John T. Downey, appointed a call member April 9; Winslow H. Dodge, appointed a call member June 1; George L. Church, appointed a permanent member September 30.

ACCIDENTS.

I am pleased to report but few accidents to members of the force, and that none were of a serious nature.

Thomas J. Parks, ran nail into foot while working at a fire, January 11. Off of duty nine days.

William H. Buchanan, ran splinter into hand while working at a fire January 29. Off of duty nine days.

Lieutenant Edward F. Conroy, cut and bruised by the falling of a portion of a burning building, August 2. Off of duty sixteen days.

John W. Jefferson, severe sprains of shoulder, back and hips, by falling in with a portion of a burning building, August 12. Off of duty twenty-two days.

Frederick A. Reed, cut and bruised by falling in with a portion of a building, August 12. Off of duty sixteen days.

Thomas J. Parks, broke a bone in his wrist by falling in trying to get on to a hose wagon while responding to a fire October 27. Off of duty forty-four days.

CONCLUSION.

In conclusion, I desire to extend my sincere thanks to the officers and members of this department for their prompt and faithful discharge of duty and hearty co-operation during the year.

Respectfully submitted,

THOMAS J. CASEY,
Chief Engineer.

APPENDIX

ROLL OF OFFICERS AND MEMBERS

ENGINEERS.

Name.	Rank.	Age.	Residence.
Thomas J. Casey	Chief Engineer	68	168 Lexington Avenue.
Nathaniel W. Bunker	Asst. Chief Engineer	58	276 Portland Street.
Timothy Curran	Chief's Driver	32	182 Lake View Avenue.

ENGINE COMPANY No. 1.

House, 108 Mt. Auburn Street.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
31	Daniel E. Powers	Engineman	42	108 Mt. Auburn Street.
2	Hiram W. Hooker	Asst. Engineman	62	108 Mt. Auburn Street.
1	Bernard J. Coakley	Driver	26	20 Walden Street.
28	Daniel E. Shea	"	44	6 DeWolf Street.
4	Thomas F. Drummond	Hoseman	33	3B Brattle Square.
	Call Force.			
27	John L. Jones	Captain	50	409 Green Street.
29	Thomas H. Kneeland	Lieutenant	37	108 Mt. Auburn Street.
25	James Jefferson	Hoseman	47	4½ South Street.
23	J. Joseph Corcoran	"	41	34 Ash Street.
74	James W. Irwin	"	46	9 Story Street.
30	John J. Foley	"	39	1 Hancock Street.
97	George B. Morse	"	34	6 DeWolf Street.

ENGINE COMPANY No. 2.

House, 384 Massachusetts Avenue.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
41	William H. Cairns	Engineman	38	18 Vernon Street.
80	John H. McDermott	Asst. Engineman	50	11 Dodge Street.
75	Charles A. Olsen	Driver	34	6A Clinton Street.
63	George W. Montgomery.	"	41	40½ Baldwin Street.
34	Herman E. Gutheim	Hoseman	25	60 Spring Street.
	Call Force.			
32	James Cunningham	Captain	59	25 State Street.
33	Arthur C. Day	Lieutenant	65	47 Austin Street.
35	Benjamin D. Foss	Hoseman	65	28 Elm Street.
37	John Haley	"	47	58 Massachusetts Avenue.
88	Charles H. Cutting	"	49	812 Main Street.
40	George F. Donovan	"	32	30 Union Street.

ENGINE COMPANY No. 3.

House, 35 Third Street.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
7	Hiram Blood	Engineman	70	66 Fifth Street.
62	Charles A. Blair	Asst. Engineman	40	22 Springfield Street.
8	Peter F. McSorley	Driver	42	94 Otis Street.
49	Patrick J. Hayes	"	39	92 Gore Street.
15	William F. Newman	Hoseman	31	37 Jefferson Street.
	Call Force.			
42	Walter Baker	Captain	48	40 York Street.
48	John F. Brassil	Lieutenant	47	3 Marney Street.
45	Eliot E. Alley	Hoseman	65	241 River Street.
46	Timothy J. Mahoney	"	54	346 Vine Street.
112	Charles H. Leddy	"	41	20 Hardwick Street.
16	William Reilly	"	32	34 Gore Street.
78	Joseph A. Lincoln	"	31	57 Spring Street.

ENGINE COMPANY No. 4.

House, 2029 Massachusetts Avenue.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
10	John E. Ricker	Engineman	57	2029 Massachusetts Avenue.
55	Jeremiah O'Connor	Asst. Engineman	43	2 Olive Place.
19	Albert S. Benson	Driver	59	52 Boylston Street.
11	George E. Muzzey	"	60	5 Blake Street.
57	John T. Henderson	Hoseman	32	27 Creighton Street.
	Call Force.			
51	Daniel A. McCaughan	Captain	44	Rear 5 Russell Street.
53	Redmond M. Burke	Lieutenant	32	Rear 5 Russell Street.
54	George F. Durgin	Hoseman	33	48 Norris Street.
52	Joseph T. Vocell	"	36	12 Bolton Street.
105	William F. Henderson	"	37	74 Rice Street.
50	George L. Vocell	"	32	23 Bolton Street.
56	Joseph A. Henderson	"	27	134 Reed Street.

ENGINE COMPANY No. 5.

House, Inman Square.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
13	Charles E. Conner	Engineman	50	1335 Cambridge Street.
3	Charles R. Hooker	Driver	57	1411 Cambridge Street.
68	James H. Furfey	"	44	59 Prince Street.
115	Frank McGrath	Acting Asst. Engineman.	37	168 Willow Street.
	Call Force.			
59	Francis P. Scanlan	Captain	55	1343 Cambridge Street.
64	William T. King	Lieutenant	45	231 Prospect Street.
61	George W. McIntire	Hoseman	47	7 Springfield Street.
66	James H. McGrath	"	45	12 Seckle Street.
60	George W. Stevens	"	35	1307 Cambridge Street.
12	John T. Downey	"	23	994 Cambridge Street.
110	Winslow H. Dodge	"	39	132 Columbia Street.

ENGINE COMPANY No. 6.

House, 176 River Street.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
98	J. Lewis Howe	Engineman	48	184 River Street.
87	Charles A. Cairns	Asst. Engineman	35	152 River Street.
127	John J. O'Callahan	Driver	32	564 Green Street.
92	Robert J. Buchanan	"	30	22 Grigg Street.
47	Exurie J. Ouimette	Hoseman	38	11A Jay Street.
9	George L. Church	"	22	90½ Inman Street.
	Call Force.			
24	John H. Brown	Captain	50	206 River Street.
73	Charles H. Waite	Lieutenant	55	46 Lopez Street.
100	John E. Savage	Hoseman	47	29 Andrew Street.
103	Thomas F. Mullin	"	28	164 River Street.
123	Louis Clauss	"	33	875 Main Street.
106	Mortimer F. Hartney	"	27	3 Jay Street.
104	Charles Barney	"	39	8 Douglass Street.

ENGINE COMPANY No. 7.

House, 350 Main Street.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
85	Thomas F. O'Connell	Engineman	40	155 Webster Avenue.
36	John McCarthy	Asst. Engineman	48	139 Massachusetts Avenue.
121	John D. Shea	Driver	30	136 Winsor Street.
126	Dennis R. Sullivan	"	30	35 Harvard Street.
5	Henry J. O'Brien	Hoseman	25	748 Cambridge Street.
	Call Force.			
93	George A. Garrity	Captain	40	7 Pioneer Street.
124	Joseph A. Wood	Lieutenant	39	81 Hampshire Street.
109	James E. Bligh	Hoseman	30	142 Willow Street.
108	Thomas A. Montgomery	"	37	104 Hampshire Street.
125	Edward Clark	"	33	234 Winsor Street.
96	Louis J. Anshelm	"	41	71 Portland Street.
86	William J. Atkinson	"	25	936 Cambridge Street.

CHEMICAL ENGINE COMPANY No. 1.

House, 5 Western Avenue.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
17	Lewis C. Clark	Lieutenant	56	264 Green Street
82	James T. McCabe	Engineman	38	125 Green Street
99	John H. Dardis	Driver	28	27 Park Street

CHEMICAL ENGINE COMPANY No. 2.

House, 167 Lexington Avenue.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
58	William H. Barrow	Lieutenant	32	117 Lexington Avenue.
6	Richard J. Doyle	Engineman	27	37 Willard Street.
18	William Haley	Driver	55	133 Lexington Avenue.

LADDER COMPANY No. 1.

House, Eliot Square.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
22	John T. McNamee	Captain	46	96 Winthrop Street.
117	Edward F. Conroy	Lieutenant	30	10 Mt. Auburn Street.
26	Walter E. Chapman	Driver	34	125 Mt. Auburn Street.
77	Benjamin McArthur	Ladderman	27	4 DeWolf Place.
122	Arthur G. McArthur	"	29	4 DeWolf Place.
	Call Force.			
79	Edward P. Donahue	Ladderman	44	1 Willard Street Court.
72	Joseph E. Burke	"	39	149 Putnam Avenue.
70	John W. Jefferson	"	36	98 Winthrop Street.
71	Charles P. Cox, Jr.	"	30	444 Green Street
120	Frederick Quenandon	"	29	562 Franklin Street.
119	Frederick A. Reed	"	30	17 Howard Street.

LADDER COMPANY No. 2.

House, 276 Portland Street.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
43	William F. Newman	Captain	56	66 Winter Street.
83	James M. Casey	Lieutenant	37	775 Cambridge Street.
20	Thomas Mimnaugh	Driver	48	35 Warren Street.
38	Albert R. Wait	Ladderman	29	934 Cambridge Street.
	Call Force.			
90	Albert Smith	Ladderman	47	233 Broadway.
95	Louis J. Stanger	"	47	275 Vine Street.
89	John J. Balfe	"	30	385 Norfolk Street.
111	Jeremiah F. Hayes	"	35	17½ Marney Street.
116	Thomas J. Lane	"	37	134 Otis Street.
113	William G. Johnson	"	40	14 Springfield Street.
112	Thomas J. Parks	"	25	148 Berkshire Street.
21	Edward E. Gaughan	"	23	78 Berkshire Street.

LADDER COMPANY No. 3.

House, 394 Massachusetts Avenue.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
44	Cutler L. Vose	Captain	33	8 Douglass Street.
114	Angus H. McDonald	Lieutenant	31	394 Massachusetts Avenue.
39	Thomas H. McCourt.	Tillerman	31	62 Columbia Street.
118	William C. Richardson	Driver	33	394 Massachusetts Avenue.
	Call Force.			
69	Charles Emerson	Ladderman	56	5 Kinnaird Street.
76	Charles A. Sharon	"	53	Rear 13 Pine Street.
91	Lincoln E. Wheeler	"	57	16 Columbia Street.
84	William D. Donovan	"	28	18 Blanch Street.

FIRES AND ALARMS

From December 1, 1900, to December 1, 1901.

DECEMBER.

Saturday, Dec. 1, 7.48 P. M. Box 72.

No. 58 Cedar Street. Occupied by Dennis Mahoney as dwelling. Loss, trifling. Cause, upsetting of a lighted lamp.

Monday, Dec. 3, 3 P. M. Still.

No. 875 Main Street. Owned and occupied by James Miller as dwelling. Loss, $95. Insurance, $1,500. Cause, clothes near stove taking fire.

Monday, Dec. 3, 8.01 P. M. Box 36.

No. 624 Massachusetts Avenue. Owned by J. A. Holmes estate. Loss, $90. Insurance, $10,000. Occupied by A. W. and F. C. Stephens as Novelty Works. Loss, $300. Insurance, $600. Cause, lighted match thrown in varnish.

Wednesday, Dec. 6, 8.31 P. M. Box 136.

Norfolk Street. False alarm given by some malicious person.

Wednesday, Dec. 6, 9.54 P. M. Box 27.

Clark Street. False alarm given by some malicious person.

Wednesday, Dec. 6, 10.23 P. M. Box 29.

Webster Avenue. False alarm given by some malicious person.

Wednesday, Dec. 6, 11.45 P. M. Box 116.

Third Street. False alarm given by some malicious person.

Friday, Dec. 7, 1.18 P. M. Box 28.

No. 33 Burleigh Street. Owned by Mary Scudder. Loss, $15. Insurance, $1,500. Occupied by Nora McLean as dwelling. Loss, $40. No insurance. Cause, paper in chimney flue taking fire and dropping on to floor.

Saturday, Dec. 8, 8.10 A. M. Still.

Ninth Street. Freight yard, Boston & Albany Railroad. Loss trifling. Originated in car loaded with coke. Cause, unknown.

Saturday, Dec. 8, 4.55 P. M. Box 34.

No. 325 Columbia Street. Cause, smoke mistaken for fire.

Saturday, Dec. 8, 5.40 P. M. Box 26.

No. 787 Main Street. Owned by Richard Dewey as lunch wagon. Loss, $20. No insurance. Cause, overheated stove pipe.

Tuesday, Dec. 11, 10.39 A. M. Box 134.

No. 1 Murdock Street. Owned by N. F. Bichtel *et al.* Loss, $400. Insurance, $1,100. Occupied by M. E. Rabion as dwelling. Loss, $28. Insurance, $600. Originated in the basement. Cause, children and matches.

Tuesday, Dec. 11, 6.05 P. M. Box 25.

Nos. 864-868 Main Street. Owned by Charles Waugh. Loss, $289. Insurance, $5,000. Occupied by Charles Waugh & Co. as carriage builders. Loss, $368. Insurance, $8,000. Occupied by C. E. Pierce & Co. as tin can manufactory. Loss, $1,339. Insurance, $4,700. Originated in paint shop on second floor. Cause, spontaneous combustion.

Wednesday, Dec. 12, 12.01 A. M. Box 37.

No. 67 Pleasant Street. Owned and occupied by S. A. Hovey as stable. Loss, $502. Insurance, $500. Originated in shed. Cause, hot ashes in barrel.

Wednesday, Dec. 12, 1.45 P. M. Still.

Nos. 604-610 Massachusetts Avenue. Occupied by A. H. Smith as provisions. No loss. Originated in cellar. Cause, lighted lamp igniting oil.

Saturday, Dec. 15, 2.34 P. M. Box 178.

Concord Avenue. Owned by New England Brick Co. as blacksmith shop. No loss. Originated in tow. Cause, hot iron.

Sunday, Dec. 16, 2.55 A. M. Still.

No. 77 Oak Street. The fire was in Somerville. Engine Co. No. 5, called.

Wednesday, Dec. 19, 12.46 A. M. Box 17.

No. 589 Main Street. Occupied by Robert Beardsley as dwelling. Loss $25. No insurance. Cause, overturning of lighted lamp.

Wednesday, Dec. 19, 8.13 A. M. Box 134.

No. 219 Elm Street. Cause, smoke mistaken for fire.

Thursday, Dec. 20, 2.25 P. M. Still.

Richdale Avenue. Cause, grass in vacant lot afire.

Sunday, Dec. 23, 1 31 P. M. Box 113.

No. 152 Third Street. Owned by Ellen Buckley. Loss, $465. Insurance, $1,000. Occupied by Ellen Buckley as dwelling. Loss, $200. No insurance. Cause, towel hanging near stove taking fire.

Monday, Dec. 24, 9.15 P. M. Still.

No. 2 Scott Street. Occupied by F. W. Taussig as dwelling. No loss. Cause, soot in chimney afire.

Tuesday, Dec. 25, 9.15 P. M. Box 137.

No. 322 Western Avenue. Owned by J. J. Blevins. Loss $25. Insurance, $1,000. Occupied by H. W. Davis as dwelling. Loss, $225. Insurance, $1,000. Cause, lighted candle setting fire to Christmas tree.

Wednesday, Dec. 26, 9.51 A. M. Box 116.

No. 206 Main Street. Occupied by Alice Hurley as dwelling. Loss, $10. No insurance. Cause, pipe smoking in bed.

Wednesday, Dec. 26, 6.33 P. M. Box 25

No 868 Main Street. Occupied by C. E. Pierce & Co. as tin can manufactory. Loss trifling. Originated on third floor. Cause, ignition of oiled waste.

Friday, Dec. 28, 1.50, P. M. Box 12.

No. 339 Bridge Street. Owned by G.A. Tourtellowt. Loss, $220. Insurance, $600. Occupied by G. A. Tourtellowt as stable. Loss, $208. Insurance, $300. Originated in hay loft. Cause, unknown.

Saturday, Dec. 29, 2.30 P. M. Still.

No 12 Pleasant Street. Owned by C S. Caswell. Loss, $60. Insurance, $1,750 Occupied by Kenny McRea as dwelling. Loss, $221. Insurance, $1,000. Originated in store room on second floor. Cause, supposed by mice and matches.

Monday, Dec. 31, 10.31 A. M. Box 26.

No. 43 School Street. Occupied by Anna Jones *et al* as dwelling. No loss. Cause, hot ashes setting fire to paper in ash pit.

JANUARY.

Tuesday, Jan. 1, 8.45 A. M. Box 178.

No. 53 Sherman Street. Owned by Agnais Rock. Loss, $35. Insurance, $2,000 Occupied by Jeremia Desillier as grocery. Loss, $100. Insurance, $500. Originated in paper under counter. Cause, supposed by stepping on and igniting a match.

Saturday, Jan. 5, 4.25 P. M. Still.

Rutherford Avenue. Boston (Charlestown District). Occupied as freight sheds. Assistance called for, Engine Company No. 3, responded.

Sunday, Jan. 6, 2.20 P. M. Still.

Waverly Street. Cause, rubbish on dump burning.

Sunday, Jan. 6, 3.18 P. M. Box 41.

No. 121 Pleasant Street. Owned by Bridget Moriarty as dwelling. No loss. Cause, thawing out water pipe.

Monday, Jan. 7, 1 P. M. Still.

No. 538 Main Street. Occupied by Ivers & Pond Piano Co. Cause, accidental automatic alarm.

Monday, Jan. 7, 1 P. M. Still

No. 43 Washington Street. Occupied as dwelling. Cause, smoke mistaken for fire.

Wednesday, Jan. 9, 4.55 P. M. Box 32.

No. 452 Winsor Street. Occupied by John Lane as dwelling. No loss. Cause, fat from boiling meat taking fire.

Thursday, Jan. 10, 6 48 P M. Box 116.

Potter Street. Owned by Warren Brothers Co. Loss, $2,498. Insurance, $5,000. Occupied by Warren Brothers Co. as tar roofing material. Loss, $2,663. Insurance, $4,500. Originated on second floor. Cause, unknown.

Thursday, Jan. 10, 10.30 P. M. Box 41.

No. 14 Fairmont Avenue Owned by J. R. Burrage. Loss, $20. Insurance, $1,000. Occupied by R W. Union as dwelling. Loss, $25. No insurance. Cause, top of lighted match flying into curtain.

Friday, Jan. 11, 3.41-3.46 A. M. Boxes 415-116.

Potter Street. Cause, rekindling of fire. No loss.

Saturday, Jan. 12, 6.10 P. M. Box 93.

No. 158 Cushing Street. Occupied by Julius Powlowski as dwelling. Cause, upsetting of a lighted lamp. Alarm needless.

Saturday, Jan. 12, 10.10 P. M. Box 271.

Rear Massachusetts Avenue. Owned and occupied by Boston & Maine Railroad Co. as tool house. Loss, $186. Insurance, $525. Cause, supposed by sparks from locomotive.

Monday, Jan. 14, 12.56 A. M. Box 26

No. 21 1-2 School Street. Owned by C. R. Cutter. Loss, $31. Insurance, $2,500. Occupied by Catherine Shea as variety store. Loss, $33. Insurance, $200. Cause, supposed by mice and matches.

Monday, Jan. 14, 9.23 P. M. Box 26.

No. 21 State Street. Owned by Dow estate. Loss,. $25. Insurance, none. Occupied by William Beresford as brass foundry. Loss, $227. Insurance, $500. Originated in the floor. Cause, hot metal.

Thursday, Jan. 17, 2.59 A. M. Box 31.

Nos. 813–815 Cambridge Street. Owned by T. A. Gannon. Loss, $811. Insurance, $1,700. Occupied by Alfred Larson as bakery and dwelling. Loss, $599. Insurance, $1,000. No. 817. Owned by James Coyle as dwelling. Loss, $50. Insurance, $1,200. Originated in attic of No. 815. Cause, defective chimney.

Saturday, Jan. 19, 2.32 P. M. Box 56.

No. 11 Frances Avenue. Occupied by E. S. Sheldon as dwelling. Cause, smoke escaping from hot air pipes.

Saturday, Jan. 19, 11.49 P. M. Box 78.

No 87 Concord Avenue. Owned by J. F. O'Brien. Loss, $183. Insurance, $2,500. Occupied by E. P. Clark as provisions. Loss, $225. Insurance, $2,000. Originated under the counter. Cause, supposed by mice and matches.

Sunday, Jan. 20, 10.17 A. M. Box 17.

No. 73 Harvard Street. Occupied by Charles Porter as dwelling. Loss, $19. Insurance, $700. Cause, explosion of water front in stove.

Sunday, Jan. 20, 4.35 P. M. Box 431.

No 182 Raymond Street. Owned by A. H. Hewes as dwelling. No loss. Cause, thawing out water pipe.

Monday, Jan. 21, 4.54 A. M. Box 28.

No. 47 Washington Street. Owned by Charles Kichner. Loss, $264. Insurance, $1,200. Occupied by W. E. Rudder as dwelling. Loss, $150. Insurance, $1,000. Cause, thawing out water pipe.

Thursday, Jan. 24, 7.45 P. M. Still.

No. 46 Tremont Street. Owned by W. E. Dodge as dwel ing. Cause, soot in chimney afire.

Thursday, Jan. 24, 8.03 P. M. Still.

No. 460 Green Street Owned by H. O. Marcy. Loss, $50. Insurance, $7,000. Occupied by E. L. Renolds as dwelling. Loss, $126. Insurance, $500. Cause, overturning of a lighted lamp.

Friday, Jan. 25, 5.24 P. M. Box 29.

No. 15 Bristol Street. Occupied by Robert Brown *et al* as dwelling. No loss. Originated in barrel of rubbish in cellar. Cause, unknown.

Saturday, Jan. 26, 11.03 A. M. Box 13.

No. 303 Cambridge Street. Occupied by V. O. L. Kalberg as furniture store. Loss $150. Insurance, $4,000. Originated in excelsior in the cellar. Cause, fire from lighted cigar.

Saturday, Jan. 26, 11.38 A. M. Box 68.

No. 1894 Massachusetts Avenue. Owned by H. C. Rand as stores. Loss trifling. Originated on the roof. Cause, sparks.

Saturday, Jan. 26, 2.05 P. M. Still.

Charles Street. Partial burning of a wagon standing in the street. Cause, set afire by boys.

Tuesday, Jan. 29, 8.14 P. M. Box 137.

No. 20 Jay Street. Occupied by Elizabeth Stewart as dwelling. Loss, $12. No insurance. Cause, upsetting of an oil stove.

Tuesday, Jan 29, 10.42 P. M. Box 59.

No. 21 Church Street. Owned by William Balmer. Loss, $100. Insurance, $2,000. Occupied by John Waugh & Co. as carpenter. Loss, $850. Insurance, $2,000. Cause, unknown.

Thursday, Jan. 31, 2.40 P. M. Still.

No. 744 Massachusetts Avenue. Occupied by The Prospect Union as restaurant. Loss, trifling. Originated in floor under store. Cause, overheated.

FEBRUARY.

Saturday, Feb. 2, 10.07 A. M. Box 134.

No. 236 Norfolk Street. Owned and occupied by J. A. Morrison as shed. Loss, trifling. Originated on roof. Cause, sparks.

Saturday, Feb. 2, 8.03 P. M. Box 26.

No. 4 Osborn Street. Occupied by B. R. Hill as cabinet maker. Loss, $40. Insurance, $3,000. Originated on second floor. Cause, unknown.

Sunday Feb. 3, 1.20 P. M. Still.

Ninth Street. Freight yard, Boston & Albany Railroad. Originated in an empty hay car No loss. Cause, set afire by boys.

Sunday, Feb. 3, 4.35 P. M. Still.

No. 129 Franklin Street. Occupied by National Buscuit Co. as bakery. Cause, accidental automatic alarm.

Monday, Feb. 4, 9.51 A. M. Box 65.

No. 19 Wendell Street Owned by A. M. Clark *et al.* Loss, $82. Insurance, $6,000. Occupied by H. L. Boyden as dwelling. No loss. Originated in partition near stove. Cause, unknown.

Monday, Feb. 4, 3.04 P. M. Box 31.

No. 94 Willow Street. Occupied by Mary Gaffney as dwelling. Cause, pot of meat on stove taking fire.

Thursday, Feb. 7, 1.47 A. M. Box 26.

No. 715 Main Street. Owned by Fannie H. Barri. Loss, $125. Insurance, $11,000. Occupied by Duncan McEtchin as dwelling. Loss, $245 Insurance, $500. Cause, lighted lamp igniting drapery.

Tuesday, Feb. 12, 3.35 P. M. Box 112.

No. 53 North Street. Owned by Frank Candora as dwelling. Loss, $8. Insurance $500. Originated on first floor. Cause, defective chimney.

Tuesday, Feb. 12, 6.01 P. M. Box 29.

No. 15 Bristol Street Occupied by several families as dwellings. No loss. Originated in kindling wood in the cellar. Cause unknown.

Wednesday, Feb. 13, 6.34 A. M Box 131.

No. 738 Cambridge Street. Owned by Louis Sandler. Loss $5. Insurance, $4,500. Occupied by Frederick Rappa as fruit store Loss, $20. Insurance $300. Cause, upsetting of lighted lamp by a cat.

Friday, Feb. 15, 8.06 A M. Box 48.

No. 1287 Cambridge Street. Owned by McClosky and Harty. Loss. $225. Insurance $7,000. Occupied by Charles Topiano as fruit store. Loss, $12. Insurance, $700. No. 1295. Occupied by John Higgins as dry goods Loss. $100. Insurance $4,000. Originated in fruit store. Cause, upsetting of and ignition naptha.

Wednesdey, Feb. 20, 4.45 P. M. Still.

No. 362 Webster Avenue. Occupied by Bessie Barbour as dwelling. Cause, pot of meat cooking on stove taking fire

Wednesday, Feb. 20, 6.55 P. M. Box 52.

No 16 Trowbridge Street. Owned and occupied by C. H. Thurston as dwelling. Loss, $39. Insurance $4,000 Originated on second floor. Cause, gas jet igniting curtain.

Thursday, Feb. 21, 2.55 P. M. Still.

No. 67 Sparks Street. Owned by Brewster heirs. No loss. Cause, soot in chimney afire.

Friday, Feb. 22, 9.05 P M. Box 34.

No. 14 Union Street Owned by John McFarlane. Loss, $42. Insurance, $2,000. Occupied by George Swenson as dwelling Loss, $50. No insurance, Originated on first floor behind a trunk. Cause, unknown.

Saturday, Feb. 23, 12.53 P. M. Box 32.

The fire was in Somerville. Alarm needless.

Saturday, Feb. 23, 2.55 P. M. Still.

No. 826 Massachusetts Avenue. Occupied by Young Men's Christian Association as bowling alley. Loss slight. Cause, gas jet igniting sheathing.

Saturday, Feb. 23, 11 35 P. M. Still

No. 15 Pleasant Street. Owned by Eliza Pike. Loss, $40. Insurance, $1,500. Occupied by R. D. Elliott as dwelling. Loss, $17 Insurance, $400. Cause, upsetting of a lamp.

Sunday, Feb 24, 9 13 P. M. Box 28.

Broadway. Cause, false alarm given by some malicious person.

Tuesday, Feb. 26, 8.15 A. M. Box 131.

No. 720 Cambridge Street. Occupied by Louis DesRosiers as dwelling. Loss, $25. Insurance, $200. Cause, oil stove taking fire.

Thursday, Feb. 28, 5 25 A. M. Box 428.

Nos. 128-140 Portland Street. Owned by Chemsford Foundry Company. No loss. Cause, hot rivets igniting floor.

Thursday, Feb 28, 2.06 P. M. Box 32.

Webster Avenue. Fire in Somerville. Alarm needless.

MARCH.

Friday, March 1, 2.36 P. M. Box 93.

No. 11 Locust Place. Owned by Michael Griffin as dwelling. Loss, $50. Insurance, $2,500. Unoccupied. Cause, over-heated stove igniting sheathing.

Saturday, March 2, 6 42 A. M Box 26.

No. 152 Washington Street. Cause, smoke mistaken for fire.

Tuesday, March, 5, 2.27 P M. Box 35.

No. 4 Worcester Street. Occupied by Alfred Nelson as dwelling. No loss. Originated under a sink. Cause, ignition of stove cloths.

Wednesday, March 6, 6.12 P. M. Box 52.

No. 1106 Massachusetts Avenue. Occupied by W L. Patten as bicycle sundries. Loss, $98. Insurance, $1,000. Cause, dropping of a match into waste paper basket.

Wednesday, March 6, 10.21 P. M. Box 61.

No. 112 Mt. Auburn Street, Trinity Hall. Owned by Alfred Hemingway. Loss, $3,593. Insurance, $14,000. Occupied by H Schenck *et. als.* as dormatories. Loss, $800. Insurance, $500. Originated on second floor. Cause, defective electric wires.

Thursday, March 7, 1.21 A. M. Box 131.

No. 22 Marion Street. Owned by Thomas Horrigan. Loss, $371. Insurance, $3,000. Occupied by several families as dwellings. No loss. Originated in the cellar. Cause, unknown.

Friday, March 8, 1.30 P. M. Still.

No. 538 Main Street Occupied by Ivers & Pond Piano Co. Cause, accidental automatic alarm.

Saturday, March 9, 4.24 A M. Box 32.

No. 1151 Cambridge Street. Owned by W. L. Lockhart. Loss, $50. Insurance, $2,000. Occupied by Michael O'Keeffe as grocery. Loss, $145. Insurance, $2,200. Cause, mice and matches.

Sunday, March 10, 6.45 P. M. Still.

No. 105 School Street. Owned by A. E. Douglass. Loss, $403. Insurance, $2,250. Occupied by W. H. Cairns as dwelling. Loss, $25. No insurance. Originated in bathroom. Cause, overturning of a lighted candle.

Monday, March 11, 6.50 P. M Box 137.

No. 23 Hayes Street. Owned by J. J. Harrington. Loss, $10. Insurance, $1,000. Occupied by John Gilfoil as dwelling. Loss, $12. No insurance. Cause, upsetting of a lighted lamp.

Monday, March 11, 10.58 P. M. Still.

No 54 Garden Street Occupied by Caroline L. Parsons as dwelling. No loss. Cause, oil in lamp taking fire.

Wednesday, March 13, 9.30 A. M. Box 32.

No. 280 Webster Avenue Owned by G. D Heffernan estate. Loss, $211. Insurance, $2,000. Occupied by A E. Reardon as variety store. Loss, $275. Insurance, $300. Cause, filling an oil lamp while lighted.

Friday, March 15, 2 31 P. M. Box 8.

First Street. Occupied by Samuel Harrison as junk shop. No loss. Cause, unknown

Friday, March 15, 10.16 P M. Box 26

No. 734 Main Street. Owned by Charles Van Bushkirk. Loss, $218. Insurance, $700. Occupied by Charles Van Bushkirk as blacksmith. Loss, $132. Insurance, $600. No. 732 Main Street. Owned by Elias Howe estate as dwelling. Loss, $150. Insurance, $400. Cause, hot coals from forge.

Tuesday, March 19, 1 02 P M. Box 17.

No 118 Washington Street. Owned by John Campbell Loss, $227. Insurance, $2,000. Occupied by Lidia Grant as dwelling Loss, $316. Insurance, $800. No. 120. Occupied by C. B Johnson *et al* as dwelling. Loss, $111. Insurance, $1,000. Cause, unknown.

Thursday, March 21, 9 01 P. M. Box 7.

Rear Prison Point Street Owned and occupied by Boston & Maine Railroad Company as machine shop. No loss. Originated in oiled waste Cause, spontaneous combustion.

Friday, March 22, 12.37 P. M. Box 162.

No. 197 Mt. Auburn Street. Owned by J. F. O'Brien as dwelling No loss. Cause, soot in chimney afire

Friday, March 22, 5.42 P. M. Box 47.

No. 385 Broadway. Owned by J. J. Bright. Loss, $70. Insurance, $7,500. Occupied by J. J Bright as dwelling. Loss, $63. Insurance, $2,500. Originated in the bathroom. Cause, dropping of a lighted match into clothes.

Monday, March 25, 7.06 P. M. Still.

No. 17½ Gore Street. Occupied by William Shacobsky as dwelling. Loss, slight Cause, child playing with matches.

Wednesday, March 27, 6.40 A. M. Still.

No. 1381 Cambridge Street. Originated in ash barrel in the yard. Cause, hot ashes.

Friday, March 29, 8 P M. Still.

No. 64 Brattle Street Occupied by R. W. Wilson as dwelling. No loss. Cause, dropping of a lighted match amongst kindling wood.

Saturday, March 30, 6.34 A M. Box 216

West Boston Bridge Occupied as a temporary office while building bridge. Loss, $300. No insurance. Cause, overturning of stove.

APRIL.

Monday, April 1, 6.02 P. M. Box 178.

No. 22 Donnell Street. Owned by P. J. Curley as stable. Loss, $300. No insurance. Unoccupied. Cause, set afire by boys.

Monday, April 1, 11.20 P. M. Box 29.

Webster Avenue. Cause, false alarm given by some malicious person.

Tuesday, April 2, 2.45 A. M. Still.

No. 22 Donnell Street. Stable. Cause, rekindling of fire.

Tuesday, April 2, 9.22 P. M. Box 36.

No. 590 Massachusetts Avenue. Owned by T. H. Raymond. Loss, $25. Insurance, $5,000. Occupied by Michael O'Keeffe as grocery. Loss, $302. Insurance, $3,400. Cause, supposed by mice and matches.

Thursday, April 4, 5.12 P. M. Box 63.

Garden Street, corner Mason. Church. Cause, smoke mistaken for fire.

Monday, April 8, 11.15 A. M. Still.

Potter Street Owned by Warren Bros. Company. No loss. Cause, overboiling of kettle of tar.

Tuesday, April 9, 8.44 A. M. Box 28.

No. 113 Harvard Street. Owned by J. F. Nowell. Loss, $28. Insurance, $13,500. Occupied by William Handey as dwelling. Loss, $162. Insurance, $1,000. Cause, lace curtain near stove taking fire.

Tuesday, April 16, 6.15 P. M. Still

No. 507 Massachusetts Avenue. Occupied by Phillips Bros. & Co. Cause, smoke mistaken for fire.

Wednesday, April 17, 8 P. M. Box 126

Boardman Street. Owned by City of Cambridge as Allston schoolhouse. Loss, $550. No insurance. Originated under the stairs in the basement. Cause, unknown

Monday, April 22, 5.10 P. M. Still.

No. 62 Hampshire Street. Occupied by H. F. Sparrow & Co. as confectioners. Cause, accidental automatic alarm.

Monday, April 22, 5.45 P. M. Box 65.

No. 8 Gray Street. Owned by Michael O'Sullivan. Loss, $115. Insurance, $4,000. Occupied by M. H. Holman as dwelling. Loss, $40. No insurance. Cause, upsetting of lighted lamps by children.

Friday, April 26, 1.45 P. M. Still.

No. 62 Brattle Street. Occupied by S. E. Clifford as dwelling. No loss. Cause, hot ashes in barrel in cellar.

Saturday, April 27, 10.52 P. M. Box 14.

No. 578 Cambridge Street. Occupied by Fannie Ross as dwelling. Loss, trifling. Cause, explosion of an oil lamp.

Tuesday, April 30, 7.22 A. M. Box 32.

No. 985 Cambridge Street. Owned by Camille White. Loss, $297. Insurance, $1,000. Occupied by F. W. Locke as groceries and provisions. Loss, $689. Insurance, $1,000. Originated under the stairs. Cause, falling of a lighted lantern.

Tuesday, April 30, 2.35 P. M. Still.

Lake Street, Belmont Owned by Cambridge Ice Company. Assistance called for, Engine Company No. 4, answered.

MAY.

Saturday, May 4, 4.50 A. M. Box 36.

No. 686 Massachusetts Avenue. Owned by G. R. Southwick. Loss, $381. Insurance, $8,000. Occupied by E. and R. Laundry as laundry. Loss, $247. Insurance, $4,000. Originated in clothes under work bench. Cause supposed by mice and matches.

Saturday, May 4, 3.10 P. M. Still.

No. 34 Sidney Street. Owned by C. E. Smart as dwelling. Loss, $25. No insurance. Originated on roof. Cause, sparks from steam road roller.

Tuesday, May 7, 11.12 A. M. Still.

No. 357 Prospect Street. Occupied by Charles McCarthy as dwelling. No loss. Cause, meat on stove taking fire.

Thursday, May 9, 11.39 A. M. Box 131.

No. 7 Marion Street. Owned by Mary E. Reis as dwelling. No loss. Originated in the cellar amongst rubbish. Cause, children and matches.

Sunday, May 12, 5.58 P. M. Still.

River Street electric car afire. Cause, defective motor.

Tuesday, May 14, 1 02 A. M. Box 153.

Riverview Avenue. Owned by E. F. Young as stable. Loss, $200. Insurance, $300. Unoccupied. Cause, incendiary.

Wednesday, May 15, 1.04 P. M. Box 62.

No. 40 Hawthorn Street. Owned by Annie Moore as dwelling. Loss, $150 Insurance, $4,000. Cause, defective chimney.

Saturday, May 18, 11.12 A. M. Box 131.

No. 14 Warren Street. Owned by E. H. Blake as dwelling. No loss. Cause, soot in chimney afire.

Monday, May 20, 12.42 P. M. Still.

No. 306 Green Street. Occupied by Ann McKinstry as dwelling. Loss, $37. Insurance, $2,000. Cause, oil stove taking fire

Thursday, May 23, 8.24 P. M. Box 23.

No. 13 Williams Street Occupied by Jane Gardham as dwelling. Loss, $23. Insurance, $300. Originated in bedroom. Cause, oil stove taking fire.

Monday, May 27, 5.40 P. M. Still.

No. 1 Village Street. Owned by Charles James. Loss, $20. No insurance. Occupied by Charles James as dwelling. Loss, $10 No insurance. Cause, screen near stove taking fire.

Thursday, May 30, 7.56 P. M. Box 31.

No. 90 Willow Street. Occupied by Simon Goldstein as dwelling. No loss. Cause, upsetting of a lighted lamp.

JUNE.

Saturday, June 1, 5.33 A. M. Box 46.

No. 118 Hancock Street. Occupied by Reed Brookings as dwelling. No loss. Cause, dropping of lighted match amongst rubbish in the cellar.

Monday, June 3, 5.35 P. M. Still.

No. 70 Broadway. Owned by M. J. Walsh as dwelling. Loss, $39. Insurance, $1,200. Originated on the roof. Cause, sparks from foundry.

Tuesday, June 4, 5.30 P. M. Still.

Blanch Street. Cause, bon-fire in vacant lot.

Wednesday, June 5, 8.57 P. M. Box 28.

No. 85 Harvard Street. Occupied by George Moore as grocery. No loss. Cause, oil stove taking fire.

Thursday, June 6, 9.20 A. M. Box 81.

Mt. Auburn Street. Owned and occupied by Cambridge Hospital. Loss, $596. Insurance, $18,500. Originated in a closet used for keeping oil, in the basement. Cause, spontaneous combustion.

Thursday, June 6, 7.26 P. M. Box 131.

No. 646 Cambridge Street. Owned by Charles Linehan. Loss, $600. Insurance, $1,000. Occupied by William Weiner as furniture store. Loss, $1,100. Insurance, $1,500. No. 648. Occupied by Fay & Darcy as pool room. Loss, $81. Insurance, $500. Originated in furniture store, and was thought to have been of incendiary origin.

Tuesday, June 11, 9.30 P. M. Box 54.

Quincy Street. College Yard. Rubbish burning. Cause, set afire.

Wednesday, June 12, 7.53 A. M. Box 271.

No. 117 Reed Street. Occupied by William Pierce as dwelling. No loss. Cause, oil stove taking fire.

Thursday, June 13, 11.40 A. M. Still.

No. 335 Washington Street. Owned by S. E. Pearson. Loss, $15. Insurance, $1,700. Occupied by Edwin Goodwin as dwelling. Loss, $20. Insurance, $1,000. Cause, oil stove taking fire.

Thursday, June 13, 4.19 P. M. Box 425.

No. 144 Green Street. Owned by Henry Duckrey. Loss, $775. Insurance, $2,000. Occupied by C. M. Johnson as dwelling. Loss, $400. No insurance. Occupied by George Jenkins as dwelling. Loss, $50. No insurance. Originated in the basement kitchen. Cause, unknown.

Sunday, June 16, 8.22 P. M. Box 58.

No. 1600 Massachusetts Avenue. Occupied by C. J. McIntire as dwelling. Loss trifling. Originated in basket of clothes in the basement. Cause, clothes in contact with gas jet.

Monday, June 17, 12.50 A. M. Still.

Cambridge Street. Cause, bon-fire in the street.

Monday, June 17, 1.25 A. M. Still.

No. 310 Cambridge Street. Owned by Nicholas Venao as bakery. Loss, $25. Insurance, $5,000. Cause, mop on top of oven taking fire.

Monday, June 17, 10 36 A. M. Box 9.

No. 134 Cambridge Street. Owned by Binney estate as carpenter shop. No loss. Originated under steps on outside of building. Cause, firecrackers.

Monday, June 17, 7.08 P. M. Box 215.

No. 89 Sixth Street. Owned by Agustas Kalhmeyer as dwelling. Loss, $70. Insurance, $1,200. Originated on the roof. Cause, firecrackers.

Monday, June 17, 8.55 P. M. Box 36.

No. 359 Green Street. Owned by A. T Green as dwelling. Loss, $10. Insurance, $2,500. Originated on the roof. Cause, firecrackers.

Tuesday, June 18, 8.50 A. M. Still.

No. 604-610 Massachusetts Avenue. Occupied by A. H. Smith as market. No loss. Originated in the basement. Cause, overturning of a lamp.

Wednesday, June 19, 11 A. M Box 59.

No. 1386 Massachussetts Avenue. Occupied by P.H. Moriarty as boot and shoe store. No loss. Originated in the basement. Cause, ignition of bottle of naptha.

Friday, June 21, 6.20 P. M. Still.

No. 40 Green Street. Occupied by National Biscuit Company. Cause, accidental automatic alarm.

Friday, June 28, 1.45 P. M. Still.

Otis Street. Irving & Casson's furniture manufactory. Cause, accidental automatic alarm.

Friday, June 28, 4.50 P. M. Still.

No. 20 Thorndike Street. Occupied by H. M. Sawyer & Son as oil clothes manufactory. Cause, accidental automatic alarm.

Friday, June 28, 11.12 P. M. Box 12.

No. 92 Winter Street. Occupied by Thomas Gandy as dwelling. Loss, $10. No insurance. Originated in a bed. Cause, child and matches.

Saturday, June 29, 5.32 P. M. Box 27.

No. 4 Dickinson Street. Owned by G. H. Hicks as stable. No loss. Originated in a barrel of rubbish. Cause, set afire by boys.

Sunday, June 30, 9 58 A. M. Box 14.

No. 57 Seventh Street. Occupied by Henry O'Neill as dwelling. No loss. Originated in wood box behind the stove.

Sunday, June 30, 10.41 A. M. Box 23.

No. 16 Watson Street. Owned by Patrick Dolan. Loss, $25. Insurance, $2,000. Occupied by Samuel Hoag as dwelling Loss, $5. Cause, gasoline stove taking fire.

Sunday, June 30, 5.55 P. M. Still.

Western Avenue. Cause, planking of bridge afire.

JULY.

Tuesday, July 2, 1.07 P. M. Box 14.

No. 137 Otis Street. Originated in shingles in the yard. Loss, trifling. Cause, set afire by boys.

Tuesday, July 2, 5.53 P. M. Still.

Pearl Street. Cause, electric car afire.

Wednesday, July 3, 6.02 P. M. Box 8.

Charles Street. Owned by F. L. Goldsmith as lumber shed. Loss, trifling. Originated on outside. Cause, set afire by boys.

Wednesday, July 3, 6.21-6.26 P. M. Box 271.

No. 2431 Massachusetts Avenue. Owned by S. A. Henderson. Loss trifling. Occupied by J. A. Tupper as druggist. Loss, $200. Insurance, $2,500. Originated in a rear room. Cause, explosion of chemicals.

Thursday, July 4, 1.20 A. M. Box 92.

Belmont Street. Owned by Mary Hogan as an old fence. Loss trifling. Cause, set afire by boys.

Thursday, July 4, 1.25 A. M. Box 442.

Putnam Avenue. Owned by D. R. Melcher. Loss, $150. No insurance. Occupied by D. R. Melcher as storage for lumber. Loss, $50. No insurance. Cause, incendiary.

Thursday, July 4, 2.28 A. M. Box 139.

No. 189 Pearl Street. Owned by Edmund Reardon. Loss, $20. Insurance, $1,000. Occupied by Alexander McDonald as dwelling. Loss, $12. Insurance, $1,000. Cause, fire-crackers thrown into open window.

Thursday, July 4. 2.55 A. M. Box 178.

Garden Street. Owned by E. A. Foster as unused dwelling. No loss. Cause, incendiary.

Thursday, July 4, 3.45 A. M. Box 92.

Mt. Auburn Street. Owned by Mt. Auburn Cemetery as fence. Loss trifling. Cause, set afire by boys.

Thursday, July 4, 8.20 A. M. Box 23.

No. 48 Lopez Street. Owned by John Dwyer as dwelling. Loss trifling. originated on roof. Cause, fireworks.

Thursday, July 4, 8.27 A. M. Box 78.

Garden Street. Owned by E. A, Foster as shed. Loss trifling. Cause, incendiary.

Thursday, July 4, 1.11 P. M. Box 15.

No. 291 Vine Street. Occupied by Cornelius Ryan as dwelling. Loss, $20. Insurance $500. Originated in a bed. Cause, child and matches.

Thursday, July 4, 1.27 P. M. Box 23.

No. 128 Pearl Street. Owned by Maria Flood. Loss, $35. Insurance, $375. Occupied by John O'Connor as dwelling. Loss, $200. No Insurance. Originated in a bedroom. Cause, child and matches.

Thursday, July 4, 8.22 P. M. Box 17.

No. 61 Washington Street. Owned by Ellen Taylor as dwelling. Loss, $12. Insurance, $2,000. Originated on the roof. Cause, fire crackers.

Friday, July 5, 12.30 A. M. Box 139.

No. 1 Magazine Court. Owned by S. F. McArthur. Loss, $499. Insurance, $1,500. Occupied by S. F. McArthur as dwelling. Loss, $610. Insurance, $1,000. Originated under a sink and in partition. Cause, thought to have been of incendiary origin.

Friday, July 5, 5.15 A. M. Box 74.

No. 12 Van Norden Street. Owned by R. M. Blodgett. Loss, $372. Insurance. $2,000. Occupied by C. W. Gardner as dwelling. Loss, $10. Insurance, $800. Originated on the roof. Cause, fire works.

Sunday, July 7, 10.41 A. M. Box 126.

No. 55 Pine Street. Occupied by Thomas Daly as dwelling. No loss. Cause, hot ashes in barrel.

Sunday, July 7, 6.34 P. M. Box 26.

No. 677 Main Street. Awning afire. Cause, cigarette dropped from window above.

Monday, July 8, 7.08 P. M. Box 87.

Foot of Lexington Avenue. Owned by Boston & Maine Railroad Company as passenger station. Loss, trifling. Originated in the roof. Cause, burning out a sparrow nest with a torch.

Tuesday, July 9, 8.57 P. M. Box 46.

No. 156 Hancock Street. Occupied by F. L. Churchill as dwelling. Loss, $24. Insurance, $1,500. Originated on second floor. Cause, gas jet igniting curtain.

Wednesday, July 10, 8.05 P. M. Box 422.

No. 168 Main Street. Occupied by Edward Kendall & Sons as boiler works. No loss. Cause, ignition of naphtha while filling lantern.

Thursday, July 11, 11.40 P. M Still.

Marcella Street. In cellar of new building. No loss. Cause, slacking of lime.

Saturday, July 13, 8.28 P. M. Box 443.

No. 410 Western Avenue. Owned by Cambridge Electric Light Company as tool house. Loss, slight. Cause, unknown.

Tuesday, July 23, 1.11 P. M. Box 215.

Ninth Street. Freight yard owned by Boston & Albany Railroad Company as freight car. Loss, trifling. Occupied by Boston Hay Storage Company as hay. Loss, $192. Insurance, $217. Cause, set afire by boys.

Wednesday, July 24, 10.47 A. M Box 139.

No. 148 Allston Street. Occupied by C. E. Belcher as dwelling. No loss. Cause, oil stove taking fire.

Thursday, July 25, 7.30 P. M. Still.

No. 445 Massachusetts Avenue. Occupied by John Thisler as gents' furnishings. Loss, slight. Cause, netting in window taking fire from gas lighter.

Saturday, July 27, 1.58 P. M. Box 39.

No. 460 Putnam Avenue. Owned by Helen Houghton. Loss, $18. Insurance, $2,500. Occupied by J. R. May as dwelling. Loss, $8. Insurance, $1,000. Cause, oil stove taking fire.

Tuesday, July 30, 5.30 P. M. Still.

No. 118 Inman Street. Owned by Thomas Dinan as dwelling. Cause, smoke mistaken for fire.

AUGUST.

Friday, Aug. 2, 11.55 A. M. Still.

No. 46 Austin Street. Owned by W. H. Wood as dwelling. Loss, $10. Insurance, $2,000. Originated on the roof. Cause, plumber's lamp.

Friday, Aug. 2, 5 28 P. M. Box 162.

Longfellow Park. Owned by John Brooks as a dwelling being constructed. Loss, $4,000. Insurance, $4,000. Cause, evidently by children who were in the building when the fire was discovered.

Monday, Aug. 5, 6.55 P. M. Still.

No. 448 Massachusetts Avenue. Occupied by W. M. Hamilton as restaurant. Loss, $10. Insurance, $500. Cause, netting in window taking fire from a match.

Tuesday, Aug. 6, 3.23 P. M. Box 21.

Foot of Hamilton Street. Car of lumber on tracks of Boston & Albany R. R. Co. Loss, trifling. Cause, set afire by boys.

Wednesday, Aug. 7, 5.55 P. M. Still.

No. 100 Main Street. Occupied by G. W. Hayden as brass foundry. Loss, $25. Insurance, $500. Originated in the floor. Cause, hot ladle.

Saturday, Aug. 10, 8.18 P. M. Box 14.

No. 9 Seventh Street. Owned by J. H. McCaffrey. Occupied by Thomas Ford *et al* as dwellings. No loss. Originated in oiled rags on a beam in the cellar. Cause, supposed of incendiary origin.

Monday, Aug. 12, 10.50 A. M. Still.

Otis Street. Occupied by Irving & Casson as furniture manufacturers. Cause, accidental automatic alarm.

Tuesday, Aug. 13, 7.56 P. M. Box 26.

No. 744 Main Street. Owned by C. E Smart. Loss, $426. Insurance, $1,800. Occupied by Shaw & Remby as wood workers. Loss, $212. Insurance, $2,000. Occupied by Auto Manufacturing Co. Loss, $4,631. Insurance, $14,000. Cause, unknown.

Wednesday, Aug. 14, 3.05 A. M. Box 26.

No. 744 Main Street. Cause, rekindling of fire.

Thursday, Aug. 15, 3.28 P. M. Box 78.

No. 19 Donnell Street. Rubbish in yard. Cause, set afire by children.

Saturday, Aug. 17, 5.53 A. M. Box 59.

No. 19 Brattle Street Owned by Whitney heirs. Loss, $340. Insurance, $20,000. Occupied by J. J. Conroy as bookbindery. Loss, $159. Insurance, $1,000. No. 17. Occupied by Alexander Millan as fish market. Loss, $12. Insurance, $800. No. 21. Occupied by D. H. Dean as grocer. Loss, $100. Insurance, $2,000. Originated in bookbindery on second floor in a coal bin. Cause, unknown.

Saturday, Aug. 17, 4.48 P. M. Box 71.

No. 2441 Massachusetts Avenue. Owned by S. A. Henderson. Loss, $27. Insurance, $3,166. Occupied by Rose Armstrong as dry goods. Loss, $75. Insurance, $2,500. Cause, oil stove taking fire.

Sunday, Aug. 18, 7.43 P. M. Box 26.

No. 744 Main Street Occupied by Shaw & Remby as wood workers. No loss. Originated amongst shavings under the stairs in basement. Cause, unknown.

Monday, Aug 19, 10.30 A. M. Still.

No. 114 Western Avenue. Occupied by F. L. Poole as dwelling. Loss, trifling. Cause, oil stove taking fire.

Monday, Aug. 19, 3.10 P. M. Still.

Blackstone Street. Riverside Press. Cause, accidental automatic alarm.

Friday, Aug. 22, 8.25 P. M. Box 19.

Massachusetts Avenue. Switch box afire on electric wire pole. Alarm needless.

Monday, Aug. 26, 7.28 A. M. Box 26.

No. 30 Osborn Street. Owned by Howe estate. Unoccupied painter's shop. Loss, trifling. Cause, unknown.

Monday, Aug. 26, 4.23 P. M. Box 137.

No. 292 Western Avenue. Occupied by Morris Ross as dwelling. Cause, pot of meat on stove taking fire.

Tuesday, Aug. 27, 9.59 P. M. Box 71.

Near Massachusetts Avenue. Tool house on Boston & Maine Railroad. Loss, slight. Cause, ignition of oiled waste.

Wednesday, Aug. 28, 4.58 P. M. Box 175.

No. 19 Crescent Avenue. Owned by Real Estate Association as dwelling. Loss, slight. Originated on the roof. Cause, sparks.

Thursday, Aug. 29, 7.10 P. M. Still.

No. 6 Harvard Place. Owned by P. F. Rourke as dwelling. Loss, $15. Insurance $2,000. Originated on outside of building. Cause, children playing with fire.

SEPTEMBER.

Monday, Sept. 2, 4.23 P. M. Box 28.

No. 119 Portland Street. Occupied by E J. Burns as dwelling. Loss, slight. Originated in the attic. Cause, child and matches.

Tuesday, Sept. 3, 10.14 P.M. Box 162.

No. 185 Mt. Auburn Street. Owned by J. F. O'Brien. Loss, slight. Occupied by C E. Goodwin as variety store. Loss, $70. Insurance, $500. Cause, falling of a lighted hanging oil lamp.

Wednesday, Sept. 4, 5.58 P. M. Box 121.

Rockingham Street. Fire on dump. Cause, burning rubbish.

Wednesday, Sept. 4, 8 52 P. M. Box 9.

No. 34 Cambridge Street. Occupied by John Begmann as blacksmith. Loss, trifling. Cause, hot coals from forge.

Friday, Sept. 6, 12.05 A. M. Still.

Binney Street. Occupied by Boston Bridge Works. Loss, slight. Cause, workman's overalls in a closet taking fire.

Friday, Sept. 6, 6.41 P. M. Box 16.

No. 74 Broadway. Occupied by Broadway Iron Foundry Company. Loss, slight. Originated in moulding flasks. Cause, hot iron.

Saturday, Sept. 7, 7.10 A. M. Still.

No. 275 Prospect Street. Owned by M. P. Butler. Loss, $21. Insurance, $3,000. Occupied by Martha Harper as dwelling. Loss, trifling. Cause, explosion of can of naphtha.

Saturday, Sept. 7, 10.10 A. M. Box 26.

No. 4 Winsor Street. Occupied as dwelling. Cause, smoke mistaken for fire.

Sunday, Sept. 8, 9.21 A. M. Box 175.

No. 19 Crescent Avenue. Owned by Real Estate Associates as dwelling. Loss, $28. Insurance, $3,000. No loss to tenants. Originated on the roof. Cause, sparks.

Sunday, Sept. 8, 11.15 P. M. Still.

Harvard Square. Lyceum building. Cause, smoke mistaken for fire.

Monday, Sept. 9, 4 58-5.02 P. M. Box 31,

Nos. 11-13 Harding Street. Owned by Alexander Nixon. Loss, $800. Insurance, $800. Occupied by Alexander Nixon as stable. Loss, $484. Insurance, $500. No. 9. Owned by Alexander Nixon. Loss, $1,184. Insurance, $3,000. Occupied by William Kane *et als* as dwellings. Loss, $450. No insurance. No. 15. Owned by Alexander Nixon Loss, $1,764. Insurance, $2,500. Occupied by Alexander Nixon *et al* as dwellings. Loss, $400. No insurance. Nos. 10-12 Hunting Street. Owned by Martin Dynan. Loss. $158. Insurance, $3,500. Occupied as dwellings. No loss to tenants. Owned by Martin Dynan as stable. Loss $48. Insurance, $500 Originated in Nixon's stable. Cause, supposed to have been by children playing with fire.

Sunday, Sept. 15, 12.56 A. M. Box 131.

No. 52 Porter Street. Owned by John Carney. Loss, $90. Insurance, $2,500. Occupied by William Flaherty as dwelling. Loss, $35. No insurance. Originated in a bed. Cause, supposed by pipe smoking.

Sunday, Sept. 15, 8 40 P. M. No alarm given.

Wellington Park, near Little river. Owned by E. L. Brodie. Loss, $. Insurance, $800. Unoccupied dwelling. Cause, incendiary.

Monday, Sept. 16, 7.44 A. M. Box 31.

No. 3 Palermo Street. Owned by Rebecca Gouldburg. Loss, $97. Insurance, $1,500. Occupied by Mary Savrensky as dwelling. Loss, $36. Insurance, $500. Cause, oil stove taking fire.

Wednesday, Sept. 18, 10.05 P. M Still.

No. 292 Cambridge Street. Occupied as savings bank. Cause, steam mistaken for fire.

Thursday, Sept 19, 11.58 A M. Box 32.

No. 472 Winsor Street. Occupied by James Furlong as dwelling. Loss, trifling. Cause, oil stove taking fire.

Thursday, Sept. 19, 4.10 P. M. Still.

No. 769 Massachusetts Avenue. Drapery on outside of building afire. Loss, slight. Cause, supposed by dropping lighted match from window.

Saturday, Sept. 21, 11.27 P. M. Box 71.

No. 29 Harvey Street. Owned by J. M. Howard. Loss, $800. Insurance, $800 Occupied by J. M. Howard as storage of old office furniture. Loss, $550. Insurance, $700. Cause, unknown.

Sunday, Sept. 22, 8.55 A. M. Box 28.

No. 88 Harvard Street. Occupied as dwelling. Cause, smoke mistaken for fire.

Sunday, Sept. 22, 12.16 P M. Still.

No. 267 Green Street. Occupied as dwelling. No loss. Cause, soot in chimney afire.

Monday, Sept. 23, 9.10 P. M. Box 116.

Potter Street. Occupied by Warren Brothers Company as roofing material. Loss, trifling. Cause, explosion of oil tank.

Wednesday, Sept. 25, 6.02 A. M. Box 31.

No. 23 Harding Street. Owned by T. J. Lane. Loss, $30. Insurance, $1,000. Occupied by Mrs.——Jenkins as dwelling. Loss, trifling. Cause, dropping of lighted match into wood box.

Wednesday, Sept. 25, 4.50 P. M. Still.

Craigie Street. Automobile in street taking fire. Loss, trifling.

Monday, Sept. 30, 3.08 P. M. Box 153.

Nos. 96-98 Plympton Street. Owned by Michael O'Sullivan. Loss, $600. Insurance, $800. Occupied by Michael O'Sullivan as stable. Loss, $625. Insurance, $2,400. Nos. 96-98. Owned by Michael O'Sullivan as dwelling. Loss, $40. Insurance, $3,500. No. 5 Riverview Avenue. Owned by Michael Shea as stable. Loss, $41. Insurance, $750. No. 7. Owned by D. C. Lang as dwelling. Loss, $53. Insurance, $500. No. 8 Mill Street. Owned by Hartshorn estate as stable. Loss, $621. Insurance, $3,200. Originated in hayloft of O'Sullivan's stable. Cause, unknown.

Monday, Sept. 30, 9.45 P. M. Box 31.

No. 71 Porter Street. Occupied by William Mahar as dwelling. Loss, trifling. Cause, lounge taking fire from a lighted match.

OCTOBER.

Thursday, Oct. 3, 6.10 P. M. Still.

No. 676 Massachusetts Avenue. Occupied by M. J. Hopkins as wood and coal office. No loss. Originated in basement. Cause, ignition of paper from hanging lamp.

Saturday, Oct. 5, 8.43 A. M. Still.

No. 9 Hillard Street. Occupied by L. R. Gifford as dwelling. No loss. Cause, soot in chimney afire.

Saturday, Oct. 5, 9.02 A. M. Box 137.

No. 230 Western Avenue. Occupied by William Snow as dwelling. Loss trifling. Originated in a bedroom. Cause, dropping of a lighted match amongst clothes.

Saturday, Oct. 5, 11.04 P. M. Box 116.

No. 180 Main Street. Owned by Roberts Iron Works Company as boiler manufacturers. Loss, $175. Insurance, $16,000. Originated in the side of the building. Cause, hot coals from forge.

Tuesday, Oct. 8, 3.09 P. M. Box 32.

No. 248 Elm Street. Occupied by Charles Kidson as dwelling. Loss slight. Cause, hanging clothes falling upon a stove.

Tuesday, Oct. 8, 10.54 P. M. Box 137.

No. 5 Ballord Place. Owned by J. J. Blevins. Loss, $1,525. Insurance, $1,800. Occupied by J. J. Blevins as stable and shed. Loss, $971. Insurance, $1,700. Originated in the shed. Cause, unknown.

Wednesday, Oct. 9, 6.50 P. M. Still.

No. 1228 Cambridge Street. Owned by Catherine Harding as dwelling. Loss slight. Cause, overheated stove pipe igniting sheathing.

Thursday, Oct. 10, 4.15 A. M. Still.

No. 304 Cambridge Street. Owned by F. X. Fitzpatrick as unoccupied building. Loss, $110. Insurance, $1,000, Cause, incendiary.

Thursday, Oct. 10, 6.08 A. M. Box 271.

No. 17 Woodbridge Street. Owned by S. F. Woodbridge. Loss, $266. Insurance, $4,000. Occupied by F. W. Woodbridge as dwelling Loss, $85. Insurance, $2,000. Originated in the cellar. Cause, hot ashes in barrel.

Thursday, Oct. 10, 9.26 P. M. Box 71.

Foot of Brookford Street. Owned by Cambridge Ice Company as an unoccupied mill. Loss, $3,050. Insurance, $3,300. Cause, incendiary.

Saturday, Oct. 12, 8.43 P. M. Box 271.

No. 2409 Massachusetts Avenue. Occupied by G. D. Lexner as boot and shoe store. Loss, $9. Insurance, $700. Cause, oil stove taking fire.

Sunday, Oct. 13, 3.55 P. M. Still.

No. 1262 Cambridge Street. Originated in the cellar of a building being constructed. Loss, slight. Cause, slacking lime.

Monday, Oct. 14, 8.49 P. M. Box 28.

No. 5 Webster Avenue. Occupied by M. A. Kreeb as grocery. Loss, $20. Insurance, $1,000. Cause, falling of a hanging oil lamp.

Thursday, Oct. 17, 5.50 P. M. Box 216.

Main Street, near bridge. Owned and occupied by Holbrook, Cabot & Daly as storage for oil, etc. Loss, $280. Insurance, $305. Cause, dropping of lighted match into naptha.

Thursday, Oct. 17, 6.57 P. M. Box 31.

No. 74 Willow Street. Occupied by Louis Levi as dwelling. Loss, trifling. Cause, lighted lamp falling from shelf.

Friday, Oct. 18, 2.57 P. M. Box 137.

No. 304 Western Avenue. Owned by T. H. Armstrong as dwelling. No loss. Originated in rubbish in the cellar. Cause, children and matches.

Friday, Oct. 18, 8.55 P. M. Box 16.

No. 5 Harvard Street. Owned by Boston Elevated Railway Company. Loss, $1,250. Insurance, $6,000. Occupied by Boston Hay and Grain Storage Company. Loss, $2,400. Insurance, $6,000. Occupied by Standard Turning Works as storage. Loss, $1,500. Insurance, $3,000. Originated on outside of building. Cause, supposed by the dropping of a match or cigar stub into loose hay.

Saturday, Oct. 19, 1.59 P. M. Box 8.

No. 25 Otis Street. Owned by John Quin. Loss, $69. Insurance, $9,250. Occupied by Otis Wood Works. No loss. Originated in shaving room. Cause, ignition of oiled waste.

Sunday, Oct. 20, 1.59 A. M. Box 26.

State Street. Owned and occupied by Blacker, Shepard Company as planing mill. No loss claimed. Originated in shaving room. Cause, sparks from chimney.

Monday, Oct. 21, 1.13 P. M. Box 162.

No. 12 Dinsmore Court. Occupied by P. J. McDonald as dwelling. Loss, slight. Cause, child set curtain afire.

Monday, Oct. 21, 5.19 P. M. Box 8.

No. 25 Otis Street. Occupied by Otis Wood Works. No loss. Originated in the shaving room.

Monday, Oct. 21, 11.15 P. M. Box 234.

No. 216 Prospect Street. Owned by W. G. MacLeod. Loss, $1,000. Insurance, $1,000. Occupied by C. A. Gould as dwelling. Loss, $1,350. Insurance, $1,500. Occupied by S. A. Follett as storage of furniture. Loss, $210. Insurance $1,000. Originated in the dining room. Cause, supposed by the explosion of an oil lamp.

Tuesday, Oct. 22, 9.40 P. M. Box 14.

No. 20 Eighth Street. Occupied by John Weltch as dwelling. No loss. Cause, dropping of a lighted oil lamp.

Thursday, Oct. 24, 9.35 P. M. Box 17.

No. 120 Washington Street. Owned by Henry Fleming. Loss, $45. Insurance, $2,000. Occupied by C. B. Johnson as dwelling. Loss, $20. Insurance, $1,000. Cause, upsetting of a lighted lamp.

Thursday, Oct. 24, 11 P. M. Still.

No. 25 Otis Street. Occupied by Otis Wood Works. No loss. Originated in shaving room.

Thursday, Oct. 24, 12.30 A. M. Still.

Fire in Somerville. Assistance asked for. Engine Company No. 5 responded.

Friday, Oct. 25, 6.32 P. M. Box 271.

No. 4 Harvey Street. Occupied by Adelard Mercier as dwelling. Loss, slight. Originated in the kitchen. Cause, explosion of a bottle of varnish.

Saturday, Oct. 26, 3 P. M. Still.

Austin Street. Wood Memorial Church. Cause, smoke mistaken for fire.

Sunday, Oct. 27, 12.19 A. M. Box 68.

No. 1892 Massachusetts Avenue. Owned by H. C. Rand. Loss, slight. Occupied by E. B. Pine as barber. Loss, $70. Insurance, $400. Originated in paper behind the mug case. Cause, unknown.

Sunday, Oct. 27, 1.45 P. M. Box 93.

No. 24 Holworthy Place. Owned by A. S. Mitchell. Loss, $200. No insurance. Occupied by Severino Lamoretti as dwelling. Loss, trifling. Originated on the roof. Cause, sparks.

Sunday, Oct. 27, 5.09 P. M. Box 31.

No. 960 Cambridge Street. Owned by Simon Fishman. Loss, $30. Insurance, $3,000. Occupied by Jacob Schimph as dwelling. Loss, $40. No insurance. Originated in a closet. Cause, unknown.

Monday, Oct. 28, 1.06 A. M. Box 416.

Broad Canal. Owned and occupied by Boston Tow Boat Co. as coal lighter. Loss, $400. Insurance, $400. Originated in engine room. Cause, ignition of oiled waste.

Monday, Oct. 28, 3.36 P. M. Box 19.

Harvard Bridge. Loss, trifling. Cause, overboiling of a kettle of tar.

Wednesday, Oct. 30, 11.56 A. M. Box 23.

No. 23 Williams Street. Owned by Sarah Gates. Loss, $470. Insurance, $2,500. Occupied by Herbert Greenleaf as dwelling. Loss, $30. Insurance, $1,000. Occupied by G. H. Black as dwelling. Loss, $40. No insurance. Cause, painter's torch.

Wednesday, Oct. 30, 3.47 P. M. Box 16.

No. 49 Harvard Street. Occupied by Bay State Metal Works. No loss claimed. Originated on outside of building. Cause, supposed by children.

Wednesday, Oct. 30, 8.33 P. M. Box 32.

No. 406 Columbia Street. Owned by Heffernan Brothers. Loss, $45. Insurance, $26,000. Occupied by J. A. Heffernan as dwelling. Loss, $40. Insurance, $1,000. Cause, top of lighted match flying into a lace curtain.

Thursday, Oct. 31, 9.47 P. M. Box 15.

No. 302 Vine Street. Owned by Mrs. Charles Williams. Loss, $85. Insurance, $1,500. Occupied by John Williams as dwelling. Loss, $25. No insurance. Originated in a bedroom. Cause, defective chimney flue.

NOVEMBER.

Friday, Nov. 1, 2.15 P. M. Box 38.

No. 50 Magazine Street. Owned by Elizabeth Hinman. Loss, $23. Insurance, $2,500. Occupied by C. W. Priest as dwelling. Loss, slight. Originated in the bathroom. Cause, defective gas pipe.

Tuesday, Nov. 5, 2.32 A. M. Box 53.

No. 34 Dunster Street. Barrels of old paper and rubbish in the yard burning. Cause, set afire.

Thursday, Nov. 7, 9.33 A. M. Box 145.

No. 62 Kinnaird Street. Owned by Thomas O'Brien. Loss, $102. Insurance, $2,500. Occupied by P. H. Johnson as dwelling. No loss. Originated on the roof. Cause, sparks.

Thursday, Nov. 7, 5.20 P. M. Still.

No. 6 Jefferson Street. Occupied as dwelling. No loss. Cause, soot in chimney afire.

Saturday, Nov. 9, 12.23 A. M. Box 116.

No. 212 Sixth Street. Owned by H. M. Bird estate. Loss, $2,522. Insurance, $3,000, Occupied by William Campbell & Co. as boiler works. Loss, $5,000. Insurance, $8,000. Cause, supposed by spontaneous combustion of oiled waste.

Saturday, Nov. 9, 11.55 P. M. Still.

No. 528 Massachusetts Avenue. Owned by A. P. Morse as dwelling. Loss trifling. Originated on the roof. Cause, sparks from chimney.

Sunday, Nov. 10, 3.20 P. M. Still.

Ninth Street. Owned by Boston Bridge Works. Loss, slight. Old lumber afire. Cause, set by boys.

Monday, Nov. 11, 6.42 A. M. Box 153.

No. 22 Grant Street. Occupied by Frank Bannan as dwelling. Cause, child playing with fire ignited its clothes. The child was burned to death.

Monday, Nov. 11, 4.15 P. M. Still.

No. 484 Cambridge Street. Occupied by John McDonnaugh as provisions. No loss. Cause, defective incandescent lamp.

Wednesday, Nov. 13, 8.13 P. M. Box 271.

No. 16 Alpine Avenue. Cause, smoke mistaken for fire.

Thursday, Nov. 14, 3.45 A. M. Box 26.

No. 196 Washington Street. Occupied by Carl Schultz as dwelling. No loss. Cause, rubbish in cellar afire.

Thursday, Nov. 14, 9.20 A. M. Still.

No. 5 Carlisle Street. Owned by J. W. Coveney as dwelling. No loss, Cause, soot in chimney afire.

Saturday, Nov. 16, 6.05 P. M. Still.

No. 234 Lake View Avenue. Occupied by George Greson as dwelling. Loss, slight. Cause, overturning of a lighted oil lamp.

Tuesday, Nov. 19, 2.09 A. M. Box 31.

No. 10 Berkshire Street. Owned by Joseph Lacasse. Loss, $50. Insurance, $5,000. Occupied by J. T. McManus as dwelling. Loss, $87. Insurance, $500. Cause, lounge near stove taking fire.

Thursday, Nov. 21, 3.35 P. M. Still.

No. 538 Main Street. Occupied by Ivers & Pond Piano Company. Cause, accidental automatic alarm.

Thursday, Nov. 21, 4.30 P. M. Still.

Everett Street. Cause, tree afire.

Saturday, Nov. 23, 5.22 P. M. Box 68.

No. 826 Somerville Avenue. Occupied by A. R. Goulding as dwelling. No loss. Originated in the cellar. Cause, lighted match thrown into excelsior.

Saturday, Nov. 23, 6.30 P. M. Still.

No. 50 Sidney Street. Occupied by G. W. Putnam as dwelling. Loss, $52. Insurance, $1,300. Cause, explosion of oil lamp.

Saturday, Nov. 23, 1.12 A. M. Box 153.

Bow Street. Cause, students celebrating with a bonfire.

Sunday, Nov. 24, 1.42 P. M. Box 17.

No. 120 Washington Street. Owned by Henry Fleming. Loss, $16. Insurance, $2,000. Occupied by Civil Croom as dwelling. Loss, $20. No insurance. Originated in a trunk. Cause, child and matches.

Monday, Nov. 25, 7.30 A. M. Still.

No. 770 Massachusetts Avenue. Owned by J. P. Webber. Loss, $35. Insurance, $25,000. Occupied by M. E. Jones as dwelling. Loss, $20. No insurance Cause, top of lighted match flying into and igniting lace curtain.

Tuesday, Nov. 26, 5.30 P. M. Still.

No. 124 Oxford Street. Cause, lighted lantern in a new building mistaken for fire.

Tuesday, Nov. 26, 6.06 P. M. Box 51.

No. 43 Ellery Street. Occupied by F. H. Miller as dwelling. Loss, slight. Originated in a closet. Cause, ignition of cloths used for polishing the stove.

Wednesday, Nov. 27, 6.27 P. M. Box 31.

Berkshire Street. Cause, light from stoves used for drying plastering mistaken for fire.

Wednesday, Nov. 27, 8.15 P. M. Still.

No. 1980 Massachusetts Avenue. Occupied by Cora Houck as boarding house. No loss. Cause, explosion of an oil lamp.

Friday, Nov. 29, 6.59 P. M. Box 234.

No. 183 Prospect Street. Owned by Maria Holt. Loss, $21. Insurance, $5,000. Occupied by Almon Norris as dwelling. Loss, $20. Insurance, $1,000. Cause, top of lighted match flying into lace curtain.

Saturday, Nov. 30, 7.29 A. M. Box 32.

No. 1128 Cambridge Street. Owned by Patrick O'Laughlin. Loss, $38. Insurance, $1,500. Occupied by D. A. Argenzio as fruit store. Loss, $30. Insurance, $200. Cause, explosion of lighted lamp in window.

REPORT OF THE CHIEF OF POLICE

To His Honor, the Mayor, and the City Council of the City of Cambridge :—

GENTLEMEN,—In compliance with the City Ordinance, I have the honor to present my annual report of the work of the Police Department for the year ending November 30, 1901.

The whole number of arrests for the year has been three thousand, two hundred sixty-seven (3,267) against three thousand, three hundred ninety-seven (3,397) last year; a decrease of one hundred and thirty (130).

Males	3,044	Adults	2,473
Females	223	Minors	794

The offences for which arrests have been made are as follows :—

Adultery	9	Gaming, or present at	45
Assault and battery	160	Gaming on Lord's day	5
Assault, felonious	5	Idle and disorderly	9
Assault of officers	7	Incest	5
Assault, indecent	3	Insane	14
Assault, with intent to rob	1	Illegal transportation	3
Abandoning child	2	Illegal sale of liquor	2
Attempt to rape	1	Interferring with an officer	1
Attempt at larceny	1	Keeping liquor with intent to sell	1
Attempt to rescue prisoner	2	Keeping unlicensed dog	2
Attempt to vote illegally	2	Keeping dangerous dog	1
Bastardy	20	Liquor nuisance	22
Being present where gaming implements were found	18	Larceny	238
Breaking and entering	101	Larceny from building	11
Bigamy	1	Larceny from person	8
Capias	34	Malicious mischief	37
Common drunkard	10	Murder	1
Common railer and brawler	1	Non-support	72
Concealing mortgaged property	6	Neglected children	13
Cruelty to animals	5	Night walking	2
Counterfeiting	2	Obtaining money by false pretence	1
Dipsomaniac	1	Obstructing street car	1
Disturbing public peace	325	Promoting lottery	1
Disorderly conduct	1	Peddling without license	1
Disorderly house	3	Present at game on Lord's Day	40
Defrauding	2	Riding bicycle on sidewalk	3
Drunkenness	1,610	Receiving stolen goods	8
Default	6	Runaways	1
Disturbance on a street car	26	Robbery	9
Discrimination	1	Rape	2
Embezzlement	1	Setting bonfire	2
Escaped prisoners	12	Safe keeping	17
Evading car fare	2	Stubborn children	18
Exposure of person	2	Selling cigarettes to minor	2
Fast driving	1	Suspicious persons	10
Forgery	3	Surrendered by bail	3
Fornication	2	Throwing missile at street car	1
Gaming nuisance	1	Threatening	2
		Truants	6

Trespass	65	Violating conditions of junk license	1
Tramps	1	Violating terms of probation	2
Using illegal measure	2	Violation of oleomargarine law	3
Vagrants	7	Violation of park rules	1
Violating city ordinances	127	Violation rules Board of Health	2
Violating liquor law	4	Violation U. S. postal law	1
Violation of milk law	2		

Whole number of lodgers, 319.

Males	316	Minors	17
Females	3	White	312
Adults	302	Colored	7

NATIVITY OF PRISONERS.

United States	1,841	France	5
Ireland	736	Poland	12
British Provinces	324	Arabia	4
England	79	Austria	5
Sweden	51	West Indies	7
Scotland	39	Egypt	3
Germany	41	Greek	1
Italy	51	Norway	8
Portugal	14	Switzerland	3
Denmark	2	Cuba	2
Russia	38	Asia	2
Belgium	2	China	3

OCCUPATION OF PRISONERS.

Agents	16	Farmers	26
Brickmakers	3	Florists	1
Brokers	2	Firemen	12
Black-miths	38	Gardeners	26
Butchers	18	Grocers	12
Brassfinishers	2	Glass cutters	9
Bakers	31	Housekeepers	152
Bottlers	2	Hostlers	13
Boilermakers	7	Hatters	2
Bookkeepers	3	Harnessmakers	5
Bookbinders	6	Helpers	2
Barbers	16	Instructors	1
Coachmen	13	Janitors	10
Cabinetmakers	11	Jewellers	2
Carpenters	66	Junk dealers	15
Coopers	13	Letter carriers	1
Conductors	7	Laborers	1,051
Clerks	74	Linemen	6
Confectioners	19	Lathers	4
Curriers	9	Liquor dealers	4
Cigarmakers	9	Lawyers	1
Cooks	13	Masons	37
Druggists	11	Musicians	2
Dentists	2	Machinists	56
Domestics	46	Milkmen	15
Engineers	9	Moulders	33
Engravers	5	No occupation	571
Constables	1	Painters	77
Carvers	4	Paperhangers	5
Dressmakers	3	Plasterers	10
Decorators	3	Peddlers	69
Electricians	6	Packers	3

Plumbers	26	Shoemakers	39
Polishers	14	Slaters	4
Printers	39	Sawyers	2
Preachers	2	Steam fitters	8
Photographers	1	Students	15
Roofers	12	Storekeepers	14
Railroad men	11	Stairbuilders	2
Ropemakers	3	Teamsters	243
Rubber workers	33	Tailors	17
Surveyors	1	Tinsmiths	13
Salesmen	20	Upholsterers	5
Stone cutters	23	Waiters	20
Sailors	8	Watchmen	2
Shippers	4	Weavers	2

MISCELLANEOUS BUSINESS.

Accidents	105	Defective wires	11
Buildings found open and secured	372	Defective streets and sidewalks	1,150
Cases investigated	1,179	Disturbances suppressed	141
Dangerous buildings	1	Dogs killed	20
Dangerous chimneys	1	Fire alarms given	13
Dead bodies found	6	Fires extinguished without alarms	9
Defective cesspools	46	Intoxicated persons helped home	1
Defective drains and vaults	6	Lost children restored	255
Defective gas-pipes	4	Sick and injured persons assisted	67
Defective water-pipes	111	Stray teams put up	30
Defective hydrants	27	Street obstructions removed	2
Defective lamps	3,875	Water running to waste	21

Amount of property reported stolen	$3,924 50
Amount of property recovered	2,381 50
Amount recovered for other cities	2,460 00

CITY PROPERTY IN USE BY POLICE DEPARTMENT.

219	badges	$150 00	*Amount brought forward*		$13,918 50
110	belts	137 50	3	patrol wagons	1,000 00
8	books	26 00	110	revolvers	495 00
4	bookcases	32 00		Ropes and stakes	8 00
8	bedsteads	40 00	3	robes, carriage	15 00
	Bedding and blankets	40 00	1	rogues' gallery	150 00
1	buggy	150 00	3	saddles and bridles	12 00
8	clocks	25 00	2	safes	200 00
2	bureaus	3 00	95	short billies	42 00
70	chairs	87 50	8	spittoons	2 00
1	carpet	10 00	1	sleigh	25 00
	Letter press and stand	10 00	1	stove	8 00
200	copies police rules	40 00	2	straps and weights	1 00
11	desks	125 00	1	telephone line	300 00
1	easy chair, matron's	10 00	3	thermometers	1 50
5	horses	500 00	6	tables	9 00
6	harnesses	120 00	40	tin dippers	4 00
4	halters	1 00	20	towels	9 00
1	hat rack	50	1	typewriter and desk	140 00
6	ink stands	3 00	2	umbrella stands	2 00
36	lanterns	27 00	1	wagon van, old	25 00
1	lounge	5 00	5	waste baskets	1 00
8	mirrors	14 00	4	water coolers	30 00
3	maps	15 00	1	wardrobe	10 00
10	rugs	20 00	4	water pails	1 00
9	pairs handcuffs	27 00	2	wagon jacks	2 00
1	police van	300 00		Operating table and chair	37 50
3	police signal systems	12,000 00	3	medicine cabinets	75 00
Amount carried forward		$13,918 50	Total		$16,523 50

EXPENDITURES.

Boarding horses	$300 00
Buttons for department	30 00
Boston Elevated Railway Company	350 00
Boston Ice Company	13 84
Cambridge Gas Light Company	543 50
Cambridge Electric Light Company	92 69
Cleaning stations	239 55
Cloth for department	564 35
Clipping horses	12 00
Coal for department	386 10
Directories for department	23 00
Diaries for department	123 78
Expressing	3 50
Fresh Pond Ice Company	30 58
Feeding prisoners	38 81
Gas Consumers Association	36 00
Hay and grain	550 09
Heating and care of buildings	890 00
Horse hire	4 00
Medical attendance	23 00
New England Telephone & Telegraph Company	333 90
Photographs for rogues gallery	34 00
Printing	79 80
Policemen, services of	113,253 52
Repairs on wagons	422 20
Repairs on harnesses	9 98
Repairs on revolvers	4 55
Repairs on buildings	223 37
Revolvers for department, new	100 00
Salary of Chief of Police	2,000 00
Salary of Deputy Chief of Police	1,500 00
Salary of Captains and Inspector	5,600 00
Shoeing horses	128 75
Supplies for stations	482 52
Travelling expenses	31 20
	$128,458 58
Appropriation	128,458 58
Expenditures	128,458 58
Expenditures	$128,458 58
Receipts	6,079 70
Balance showing actual cost	$122,378 88

THE FORCE.

The organization of the force consists of a chief, deputy chief, three captains, one chief inspector with the rank of captain, one assistant inspector with the rank of lieutenant, six sergeants, eighty-seven patrolmen, ten reserve patrolmen, four drivers of patrol wagons, two drivers of ambulance, two matrons and one patrolman on the pension list.

The roster of the department is as follows :—

Chief, LOTHROP J. CLOYES.

Deputy Chief, WILLIAM F. BATCHELDER.

Captains.

Mark J. Folsom. John F. Murray. Fred B. Pullen.

Chief Inspector.

James E. Murray.

Assistant Inspector.

Henry C. Jones.

Sergeants.

William Mullett.
Daniel Callahan.
James S. Alexander.
Charles L. Pike.
David A. Stevens.
Michael J. Conry.

Patrolmen.

Charles F. Aberle
William H. Aberle
Frederick Apel
Richard H. Aylward
George T. Barrington
Edward F. Belcher
Elbridge S. Blen
Michael J. Brennan
Thomas M. Campbell
Daniel F. Counihan
James A. Cox
Timothy Corcoran
John Coulter
Edward J. Comerford
Michael Culhane
John W. Deehan
Patrick Doyle
Patrick F. Dunlea
Thomas F. Dynan
Frederick M. Ellis
James B. Forristall
Joseph H. Furbush
Michael A. Ginty
Herbert Gordon
William H. Graves
John J. Griffiths
Mortimer M. Hackett
James P. Hall
John A. Hezlitt
Benjamin F. Higgins
William H. Hill
Simon D. Hiscock
Robert T. Hixon
James H. H. Holt
William H. H. Howe
Patrick J. Hurley
Dexter Jewett
John Kelleher
James M. Keaney
Fred L. Ladd
Frederick W. Law
Timothy F. Leahy
Dennis F. Leahy
George J Mahoney
John P. Maloy
Charles C. Marston
John J. McBride
Jeremiah McCarthy
Charles J. McCann
Bernard McCaffrey
Edward J. McCabe
Joseph F. McCorry
John E. McCrehan
James L. McElroy
William F. McKeown
William H. McMenimen
James E. McNulty
Patrick F. Murray
Robert E. Mullen
Simon J. Mulvaney
William N. Mullins
Richard R. McFadden
Michael Neilan
John P. Neilan
Joseph W. Parks
Charles W Priest
Charles H. Presho
Thomas J. Real
Ralph R. Rice
Frederick A. Robinson
William H. Robertson
Bernard J. Roper
Thomas P. Rowe
William H. Rowe
Frank W. Scobey
Benjamin C. Scully
John E. Shaughnessy
John W. Skelley
George Smyth
Cornelius Sullivan
Joseph C. Temple
David H. Walsh
John H. Wells
Edward J Welch
Orrin B. White
John E. Winslow
Charles W. Wyman

Reserve Patrolmen.

Edward F. Horrigan	Charles E. Bradley
Anton B. Diehl	Frank D. LaMarche
David L. Walsh	Ernest E. Blanchard
John W. Roberts	John J. Canney
Harry W. Davis	Michael J. Kelley

Drivers.

John T. Cook	John Coffey
John McCauley	Warren H. Dow
John Sullivan	George E. Sherman

Matrons.

Ellen S. Haynes	Augusta M. Stearns

Pensioner.

Benjamin McKeen.

Twenty-seven patrolmen are on duty in the day time, one in the Public Library, one in the City Hall, one detailed as clerk at Police Headquarters, one in Police Station 4, and twenty-three for street duty.

During the night time the deputy chief, six sergeants, and sixty-eight patrolmen are on duty, one as house officer in Police Station 4, two in wagon houses, and sixty-five for street duty.

Two patrolmen are detailed to assist the Inspectors.

CHANGES.

During the year two reserve officers have been promoted to patrolmen, four reserve officers have been appointed and one patrolman pensioned.

NO-LICENSE.

As in former years under the no-license law every endeavor has been made to suppress the illegal sale of intoxicating liquors, search warrants have been served where it was suspected liquor was being sold illegally, twenty-eight convictions for violating the liquor law have been secured.

SIGNAL SYSTEMS.

Duty calls by officers	382,961
Telephone calls	17,342
Wagon calls	1,516
Miles run	2,784
To fires	32
Sick and injured persons carried to hospital	25
Sick and injured persons carried home	15
Other runs	200

AMBULANCE.

The ambulance has been called to three hundred and eighty-three (383) accidents, and fifty-five (55) removals.

MATRONS.

There were two hundred and twenty-three (223) females arrested during the year, an increase of one (1) over last year. All have received the care and attention of the matrons.

UNIFORM CLOTH FOR THE DEPARTMENT.

There has been purchased for the department during the year cloth to the amount of $564.35. The money for the sale of the same to the members or the department has been paid to the City Treasurer.

In concluding this report I desire to extend to His Honor, the Mayor, the City Council, the City Solicitor, and all others who have so kindly co-operated with me in the performance of the duties of my office, my sincere thanks.

LOTHROP J. CLOYES,
Chief of Police.

REPORT OF THE BOARD OF HEALTH

To the Honorable, the City Council: —

In compliance with the Public Statutes creating Boards of Health and defining their duties, we have the honor to make our annual report for the year ending December 31, 1901.

We respectfully call the attention of your honorable body to the following list of complaints investigated and nuisances abated during the year: —

Full, overflowing, and offensive privy vaults	24
Offensive and defective water-closets	205
Full and defective cess-pools and catch basins	15
No traps to sinks	22
Leaky and defective traps	37
Defective drainage, open and defective drains	83
Plumbing tests made	119
Filthy yards	591
Filthy stables and cow-sheds	3
Manure in yards and lots	18
Wet and damp cellars	24
Stagnant water on premises	3
Dead animals on premises	23
Dead hens on premises	21
Filthy buildings	5
Filthy cellars	261
New water closets put in	41
Dirty bakeries	6
Houses vacated	6
Dirty hen-coops	30
Miscellaneous	26
Total	1,559
Number of inspections	9,509
Number of subsequent inspections	12,409
Total	21,918
Number of notices served	148
Slop closets and sluice vaults abated	13
Offal receptacles cleaned	38
Vacant lots cleaned	16
Defective plumbing in whole house remedied	10
Privy-vaults abated	3
Cess-pools abated	8
Number of houses placarded	342
Premises disinfected	1,081
Number of cellars from which hens were removed	10
Number of patients taken to hospital	217

MEDICAL INSPECTION OF SCHOOLS.

The diseases discovered in the schools and the number of cases were as follows: —

Chicken-pox	17
Diphtheria	6
Measles	28
Mumps	30
Influenza	12
Pediculosis	252
Whooping-cough	18
Diseases of ear	25
Diseases of eye	150
Diseases of heart	2
Diseases of nervous system	28
Diseases of respiratory system	20
Diseases of skin	153
All other diseases	329
Total	1,070

TEMPORARY HOSPITAL.

DIPHTHERIA.

The hospital was reopened October 29, 1900, from which date to December 31, 1901, inclusive, there were admitted 211 cases in each of which the clinical diagnosis was confirmed by a positive culture. Of these cases there remained in the hospital on December 31, 1901, 11 cases, leaving 200 cases of this group for consideration. Of this number 46 were that form of the disease called membraneous croup. Of the total 200 cases, 26 died, a fatality of 13 per cent. Of the 46 membraneous croup cases 11 died, a fatality of 23.9 per cent., leaving a fatality of 9.7 per cent. for the cases constituting the ordinary form of the disease.

The length of stay in hospital and the termination of the illness in this group of cases (those clinically and bacterially diphtheria) were as follows: —

Days.	Recovered.	Died.	Days.	Recovered.	Died.
Under 1	..	7	30	2	..
1	..	3	31	5	..
2	..	1	32	2	..
3	..	1	33	3	..
4	..	1	34	2	..
5	..	1	35	3	..
6	1	1	36	1	1
8	1	..	37	2	..
9	..	1	38	1	..
10	1	2	39	1	..
11	6	..	40	1	..
12	5	1	41	1	..
13	5	..	42	1	..
14	11	..	43	1	..
15	8	..	45	1	..
16	7	..	48	1	..
17	6	..	49	1	..
18	6	1	51	3	..
19	10	..	52	2	..
20	10	1	53	1	..
21	11	..	55	2	..
22	9	..	65	1	..
23	7	1	68	1	..
24	6	..	69	1	..
25	6	1	70	1	..
26	7	..	78	1	..
27	4	..	99	..	1
28	2	1			
29	3	..		174	26

There were also admitted 14 patients, all of whose cultures taken for diagnosis proved negative. Of these 14 patients, one died, and 13 were discharged well. Of the patients discharged well two had the laryngeal form of the disease.

Length of stay in hospital and termination of illness was as follows: —

Days.	Recovered.	Died.	Days.	Recovered.	Died.
1	..	1	11	1	..
3	2	..	12	1	..
4	1	..	16	1	..
5	1	..	17	1	..
6	1	..	32	1	..
8	2	..			
9	1	..	Total..	13	1

There were remaining in hospital on December 31st eleven cases, all with positive cultures for diagnosis. Of these eleven cases two had been there 1 day each, one case 8 days, one case 16 days, one case 19 days, one case 27 days, two cases 32 days each, one case 45 days, one case 66 days, one case 105 days.

Total number of cases admitted, 225.

E. EDWIN SPENCER,
CHARLES HARRIS,
WM. RODMAN PEABODY,
Board of Health of City of Cambridge.

OFFICE OF THE BOARD OF HEATH,
City Hall, December 31, 1901.

To the Honorable, the City Council: —

This Board herewith respectfully submits its annual financial statement, it being for the year ending November 30, 1901: —

Amount appropriated for the Health Department	$19,000 00	
Transferred to Temporary Hospital Account	500 00	
Balance		$18,500 00

AMOUNT EXPENDED.

Advertising	$14 73	
Ambulance (repairs and maintenance)	42 75	
Bacteriological examinations	1,080 00	
" supplies (laboratory)	260 17	
Billings & Stover (prescription)	20	
Branding stamps and outfits	5 25	
Book (Municipal Sanitation in U. S.)	5 00	
Burial of animals	94 50	
Candles	1 40	
Car tickets	450 00	
Carriage hire	101 50	
Certified copy of mortgage	1 39	
Chemicals	173 48	
Directories	8 00	
Disinfecting bags	3 60	
Expressage	11 35	
Formaldehyde lamps and maintenance	84 38	
Harness and wagon repairs and maintenance	58 60	
Hospital, Cambridge (care of patients)	3,972 90	
" Carney (care of patients)	97 14	
Keep of horse, shoeing and storage	402 00	
Justice of Peace Warrant	7 00	
Legal services	50 06	
Matches	1 50	
Public sanitaries	63 96	
Printing and postage	264 97	
School inspection (salaries of physicians)	1,299 48	
Services of Medical Inspector and physician to Board	3,000 00	
" clerk	1,200 00	
" secretary	800 00	
" sanitary inspectors	2,852 50	
" driver	750 00	
" plumber	950 00	
" Dr. Brough	25 00	
Stamp and mailing expense	80	
Stationery	48 18	
Suit of clothes	18 00	
Tables statistics	16 20	
Telephones	177 21	
Vaccine points	69 75	
Vials and rubber stoppers	3 75	
Wise's Binders	3 00	
Articles for smallpox hospital	30 25	
Total expenditures		18,499 95
Balance of appropriation unexpended		05

By direction of the Board of Health,

JAMES B. SOPER, *Clerk.*

TEMPORARY HOSPITAL.

DIPHTHERIA.

59 Reservoir Street.

Original appropriation	$6,000 00	
Additional " (from Contingent Fund)	3,989 73	
" " (tranferred from general appro'tion)	500 00	
		$10,489 73

AMOUNT EXPENDED.

Butter and eggs	$228 54	
Coal and wood	214 28	
Consultations	30 00	
Express	2 95	
Fee (Young Women's Christian Association)	75	
Fish	7 37	
Furnishings	317 88	
Gas	113 90	
Groceries	366 52	
Ice	39 74	
Ice-cream	1 00	
Medical supplies	629 91	
Milk	278 94	
Moving	19 00	
Printing	3 50	
Provisions	493 92	
Repairs	42 25	
Seeds, etc.	4 30	
Services of physician	1,303 57	
" matron	1,303 57	
" nurses	3,446 57	
" cook	308 58	
" laundry maid	274 30	
" house man	730 00	
" " servant	235 02	
" temporary help	47 23	
Telephones	46 14	
Total expenditures		10,489 73
Balance		0 00

By direction of the Board of Health,

JAMES B. SOPER, *Clerk.*

BACTERIOLOGICAL LABORATORY,
CITY HALL, CAMBRIDGE, January 1, 1902.

To the Board of Health:—

GENTLEMEN: — I beg to submit the following report of work done in the laboratory during the year 1901. The total number of examinations made was 2,959, distributed as follows: —

	Throat Cultures for Diptheria.	Sputum Examinations for Tuberculosis.	Blood Examinations for Typhoid Fever.	Total.
January	450	23	20	493
February	320	13	12	345
March	298	23	5	326
April	226	26	9	261
May	197	27	10	234
June	154	18	10	182
July	83	14	8	105
August	104	8	20	132
September	74	23	35	132
October	179	18	25	222
November	244	22	16	282
December	223	14	8	245
Total	2,552	229	178	2,959

The throat cultures for diphtheria may be divided into two groups, the first comprising those taken for the purpose of diagnosis, the second including those taken for release after the disappearance of the clinical signs.

CULTURES FOR DIAGNOSIS.

	Positive.	Negative.	No Growth.	Total.
January	89	88	15	192
February	36	78	10	124
March	42	89	3	134
April	29	56	5	90
May	29	51	1	81
June	22	44	0	66
July	19	9	0	28
August	21	17	1	39
September	12	17	1	30
October	41	48	0	89
November	35	55	1	91
December	20	52	0	72
Total	395	604	37	1,036

CULTURES FOR RELEASE.

	Positive.	Negative.	No Growth.	Total.
January	91	139	28	258
February	84	101	11	196
March	79	79	6	164
April	62	72	2	136
May	56	58	2	116
June	22	65	1	88
July	19	31	5	55
August	17	47	1	65
September	13	31	0	44
October	35	55	0	90
November	80	69	4	153
December	74	74	3	151
Total	632	821	63	1,516

The 1,036 cultures for diagnosis were from 936 cases, 100 being second cultures from cases where the first test was doubtful or unsatisfactory. During the year there were 607 cases of diphtheria reported to the Board of Health but the diagnosis was confirmed by culture in only 361 cases. In 223 cases, the first culture was taken after the disappearance of clinical signs from the throat, and 122 of these cases were negative at the first examination. As in many of these cases the release culture was found to be negative within a few days after the report of the case, it seems probable that a certain proportion of them were not true diphtheria. The fact that the clinical diagnosis was confirmed by bacteriologic test in only 60 per cent. of the reported cases, shows a regretable lack of inclination on the part of the physicians of the city to avail themselves of the facilities of the laboratory.

Of the 229 sputa examined for tuberculosis, 58 were positive and 171 negative. Of 178 samples of blood tested for the widal reaction for typhoid, 45 were positive and 133 negative.

There have been no changes of importance in the methods of examination used during the past year.

Respectfully submitted,

EUGENE A. DARLING, M. D.

VITAL STATISTICS.

Death Rate, per 1,000 Living, from All Causes.
Estimated Population, 94,084.

1892	1893	1894	1895	1896	1897	1898	1899	1900	1901
19.44	20.89	19.56	18.40	18.87	17.93	17.65	17.25	16.87	16.72

The mean annual death rate for the ten years, 1892 to 1901, inclusive, was 18.35.

In calculating death rates, the deaths of non-residents occurring in the City were excluded, and the deaths of residents wherever they occurred were included.

The estimate of population was furnished by the State Board of Health.

SCARLET FEVER.

CASES REPORTED.

Ward.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
1.....	1	0	3	0	0	2	0	6	0	1	0	0	13
2.....	4	2	6	1	4	2	1	0	0	0	2	4	26
3.....	5	1	4	2	0	1	0	2	0	0	8	3	26
4.....	2	0	4	4	2	2	3	0	3	1	1	6	28
5.....	1	4	1	1	0	0	0	0	0	0	1	0	8
Total.....	13	7	18	8	6	7	4	8	3	2	12	13	101

The reported cases of Scarlet Fever show a decrease of 75 cases from those reported in 1900.

Ward 1 shows a decrease of 8 cases.
Ward 2 shows a decrease of 43 cases.
Ward 3 shows a decrease of 12 cases.
Ward 4 shows a decrease of 8 cases.
Ward 5 shows a decrease of 4 cases.

Cases Reported Weekly.

Jan. 5	3	July 6	1
" 12	4	" 13	1
" 19	3	" 20	1
" 26	2	" 27	1
Feb. 2	3	Aug. 3	2
" 9	1	" 10	3
" 16	1	" 17	2
" 23	2	" 24	1
Mar. 2	2	" 31	0
" 9	4	Sept. 7	0
" 16	6	" 14	0
" 23	5	" 21	1
" 30	3	" 28	0
April 6	3	Oct. 5	3
" 13	3	" 12	1
" 20	2	" 19	0
" 27	0	" 26	0
May 4	0	Nov. 2	1
" 11	1	" 9	0
" 18	3	" 16	7
" 25	2	" 23	1
June 1	0	" 30	3
" 8	2	Dec. 7	4
" 15	1	" 14	4
" 22	3	" 21	3
" 29	1	" 28	1

Age and Sex Distribution of 100 Cases.

Age.	Males.	Females.	Persons.
0- 1 Year	0	1	1
1- 2 Years	1	4	5
2- 3 "	4	11	15
3- 4 "	4	8	12
4- 5 "	10	3	13
5-10 "	13	27	40
10-15 "	2	3	5
15-20 "	1	3	4
20-30 "	0	2	2
30-40 "	1	2	3
Total	36	64	100

Death Rate per 1000 Living.

1892	1893	1894	1895	1896	1897	1898	1899	1900	1901
0.22	0.87	1.27	0.20	0.07	0.11	0.06	0.08	0.09	0.08

Morbidity, or Sick Rate, per 1000 Living.

5.01	8.84	11.37	3.59	2.36	2.68	1.38	1.75	1.91	1.07

Fatality, or Case Death Rate, Percentage.

4.54	9.85	11.20	5.80	3.03	4.32	4.91	5.06	5.11	7.92

For the ten years recorded above the mean annual death rate was 0.30; the mean annual morbidity, 3.99; the mean annual fatality, 6.17.

DIPTHERIA.

CASES REPORTED.

Ward.	Jan	Feb.	Mar.	Apr	May.	June.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
1.....	15	6	12	11	1	2	5	0	1	9	8	1	71
2.....	53	24	17	17	9	15	4	11	13	22	22	12	219
3.....	12	9	5	11	8	10	10	3	3	7	4	4	86
4.....	32	14	16	14	9	6	12	11	1	20	23	18	176
5.....	6	6	8	3	8	7	1	6	1	4	5	8	63
Total.....	118	59	58	56	35	40	32	31	19	62	62	43	615

The reported cases of Diphtheria show a decrease of 310 from those reported in 1900.

Ward 1 shows an increase of 17 cases.
Ward 2 shows a decrease of 128 cases.
Ward 3 shows a decrease of 82 cases.
Ward 4 shows a decrease of 63 cases.
Ward 5 shows a decrease of 54 cases.

Cases Reported Weekly.

Jan. 5	31	July 6	6
" 12	24	" 13	6
" 19	41	" 20	6
" 26	19	" 27	8
Feb. 2	22	Aug. 3	15
" 9	21	" 10	9
" 16	9	" 17	3
" 23	13	" 24	3
Mar. 2	11	" 31	7
" 9	15	Sept. 7	5
" 16	17	" 14	3
" 23	9	" 21	2
" 30	11	" 28	5
April 6	12	Oct. 5	9
" 13	8	" 12	18
" 20	12	" 19	10
" 27	18	" 26	19
May 4	14	Nov. 2	15
" 11	3	" 9	15
" 18	12	" 16	14
" 25	2	" 23	14
June 1	10	" 30	13
" 8	11	Dec. 7	12
" 15	10	" 14	7
" 22	10	" 21	9
" 29	9	" 28	10

Age and Sex Distribution of 607 Cases.

Age.	Males.	Females.	Persons.
0– 1 Year	9	8	17
1– 2 Years	18	6	24
2– 3 "	28	25	53
3– 4 "	27	31	58
4– 5 "	40	30	70
5–10 "	90	117	207
10–15 "	37	37	74
15–20 "	15	18	33
20–30 "	25	28	53
30–40 "	1	11	12
40–50 "	1	3	4
50–60 "	0	1	1
70–80 "	0	1	1
Total	291	316	607

Death Rate per 1000 Living.

1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
0.75	0.53	0.76	1.29	0.77	0.60	0.34	0.61	0.78	0.62

Morbidity, or Sick Rate, per 1000 Living.

1.74	1.33	2.24	7.27	5.43	3.74	1.73	5.58	10.00	6.53

Fatality, or Case Death Rate, Percentage.

37.8	36.8	32.5	17.8	13.6	15.8	19.0	10.9	7.78	9.59

For the ten years recorded above, the mean aunual death rate was 0.70; the mean annual morbidity, 4.55; the mean annual fatality, 20.15.

TYPHOID FEVER.

CASES REPORTED.

Ward.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct	Nov.	Dec.	Total.
1.....	2	2	0	0	2	1	0	2	6	1	1	3	20
2.....	2	1	0	2	1	1	0	1	8	8	3	1	28
3.....	0	2	0	0	1	0	1	4	3	3	1	0	15
4.....	1	0	4	0	0	0	2	1	10	6	3	2	29
5.....	1	0	0	0	0	0	0	1	0	0	0	2	4
Total.....	6	5	4	2	4	2	3	9	27	18	8	8	96

The reported cases of Typhoid Fever show a decrease of 15 cases from those reported in 1900.

Ward 1 shows a decrease of 10 cases.
Ward 2 shows a decrease of 9 cases.
Ward 3 shows no change.
Ward 4 shows an increase of 11 cases.
Ward 5 shows a decrease of 7 cases.

Age and Sex Distribution of 89 Cases.

Age.	Males.	Females.	Persons.
2- 3 Years	0	1	1
4- 5 "	0	2	2
5-10 "	3	4	7
10-15 "	3	6	9
15-20 "	8	5	13
20-30 "	15	12	27
30-40 "	12	9	21
40-50 "	2	2	4
50-60 "	1	2	3
60-70 "	1	0	1
70-80 "	0	1	1
Total	45	44	89

Death Rate per 1000 Living.

1892	1893	1894	1895	1896	1897	1898	1899	1900	1901
0.20	0.20	0.29	0.14	0.37	0.14	0.15	0.23	0.16	0.10

Morbidity, or Sick Rate, per 1000 Living.

1.07	1.20	1.50	1.31	3.04	1.22	1.09	1.11	1.20	1.02

Fatality, or Case Death Rate, Percentage.

18.7	17.3	17.5	11.2	11.7	10.4	14.5	20.0	13.5	10.4

For the ten years recorded above the mean annual death rate was 0.19; the mean annual mobidity, 1.37; the mean annual fatality, 14.5.

MEASLES.

CASES REPORTED.

Ward.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
1	0	0	1	1	11	18	16	0	0	0	2	5	54
2	0	1	2	35	89	46	8	1	0	1	2	3	188
3	0	1	7	8	7	13	18	1	0	25	40	17	137
4	0	0	1	20	70	57	12	0	0	0	0	1	161
5	1	1	0	0	1	2	15	0	0	1	0	1	22
Total	1	3	11	64	178	136	69	2	0	27	44	27	562

The reported cases of Measles show an increase of 424 over those reported in 1900.

Ward 1 shows an increase of 18 cases.
Ward 2 shows an increase of 144 cases.
Ward 3 shows an increase of 118 cases.
Ward 4 shows an increase of 144 cases.
Ward 5 shows no change.

Cases Reported Weekly.

Jan. 5	1	July 6	31
" 12	0	" 13	11
" 19	0	" 20	15
" 26	0	" 27	8
Feb. 2	0	Aug. 3	4
" 9	0	" 10	0
" 16	1	" 17	2
" 23	0	" 24	0
Mar. 2	2	" 31	0
" 9	0	Sept. 7	0
" 16	5	" 14	0
" 23	4	" 21	0
" 30	2	" 28	0
April 6	3	Oct. 5	1
" 13	13	" 12	8
" 20	5	" 19	2
" 27	33	" 26	11
May 4	20	Nov. 2	7
" 11	49	" 9	12
" 18	44	" 16	7
" 25	43	" 23	3
June 1	41	" 30	20
" 8	59	Dec. 7	5
" 15	24	" 14	14
" 22	23	" 21	6
" 29	21	" 28	1

Age and Sex Distribution of 524 Cases.

Ages.	Males.	Females.	Persons.
0– 1 Year	6	7	13
1– 2 Years	21	19	40
2– 3 "	24	22	46
3– 4 "	31	19	50
4– 5 "	33	29	62
5–10 "	136	113	249
10–15 "	11	11	22
15–20 "	4	6	10
20–30 "	10	16	26
30–40 "	2	4	6
Total	278	246	524

Death Rate per 1000 Living.

1892	1893	1894	1895	1896	1897	1898	1899	1900	1901
2.02	0.14	0.00	0.03	0.05	0.03	0.01	0.08	0.00	0.10

Morbidity, or Sick Rate, per 1000 Living.

.....	.....	.....	3.05	2.72	4.78	0.60	5.26	1.50	5.97

Fatality, or Case Death Rate, Percentage.

.....	.....	.....	1.20	2.20	0.73	1.80	1.69	0.00	1.76

For the ten years recorded above the mean annual death rate was 0.24.

For the seven years recorded above the mean annual morbidity was 3.41; and the mean annual fatality was 1.34.

Death Rate per 1000 Living.

	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
Cancer	0.56	0.60	0.59	0.77	0.68	0.54	0.82	0.56	0.75	0.97
Diarrhœal diseases	2.04	1.64	2.14	1.69	2.41	2.21	2.00	0.35	1.51	0.97
Phthisis	2.69	2.76	2.08	2.22	2.28	2.29	2.24	1.85	2.25	1.99
Whooping-cough	1.14	0.20	0.43	0.13	0.21	0.19	0.25	0.31	0.13	0.11
Bronchitis	0.87	0.85	0.65	0.50	0.70	0.62	0.52	0.56	0.52	0.37
Pneumonia	1.45	2.06	1.41	1.40	1.91	1.20	1.66	1.81	1.65	1.84

The mean annual death rate for the ten years recorded above was of cancer, 0.68; of diarrhœal diseases, 1.79; of phthisis, 2.26; of whooping-cough, 0.21; of bronchitis, 0.61; of pneumonia, 1.63.

RETURN OF DEATHS (NON-RESIDENTS OMITTED).

Age and Sex Distribution.

Age.	Males.	Females.	Persons.
0– 1 Year	193	143	336
1– 2 Years	51	49	100
2– 3 "	10	19	29
3– 4 "	17	12	29
4– 5 "	13	4	17
5–10 "	21	24	45
10–15 "	17	9	26
15–20 "	17	16	33
20–30 "	60	58	118
30–40 "	58	64	122
40–50 "	67	53	120
50–60 "	86	77	163
60–70 "	83	86	169
70–80 "	59	106	165
Over 80 "	35	67	102
Total	787	787	1574

Monthly Distribution.

January	160	July	119
February	143	August	140
March	131	September	133
April	127	October	128
May	122	November	134
June	111	December	126

CAUSES.

	Males.	Females.	Persons.
Bronchitis	20	17	37
Pneumonia	94	80	174
Cancer	33	59	92
Cerebro-spinal Meningitis	4	2	6
Cholera Infantum	20	18	38
Diarrhoea and Cholera Morbus	34	18	52
Dysentery	2	0	2
Diphtheria and Croup	34	25	59
Erysipelas	2	1	3
Fever, Scarlet	4	4	8
Fever, Typhoid	6	4	10

CAUSES — Continued.

	Males.	Females.	Persons
Influenza	4	13	17
Malaria	0	1	1
Measles	4	6	10
Phthisis	101	87	188
Puerperal Septicæmia	0	1	1
Smallpox	1	2	3
Whooping-cough	5	6	11
Diseases of Brain and Spinal Cord	66	105	171
Diseases of Heart	73	75	148
Diseases of Kidney	43	28	71
Accident	40	19	59
Homicide	1	0	1
Suicide	8	2	10
Unknown and ill-defined	47	51	98
All other causes	141	163	304
Total	787	787	1,574
Still births	67	44	111

SMALLPOX.

Smallpox, which had prevailed widely throughout our country for some time, appeared in Cambridge in the latter part of October; the first patient being a young man who had contracted the disease in St. John, New Brunswick. He had never been vaccinated. He had a satisfactory but tedious recovery, being in the detention hospital about eight weeks. Up to and including December 31, there have occurred in all fifteen cases, of which number, three have died. Thirteen of these cases have been treated in the detention hospital, of whom one, an unvaccinated woman, died; six have been discharged well and six remained under treatment on December 31. Of these six last mentioned, four were convalescent on December 31, and the other two in a satisfactory condition. Of the two other deaths, one occurred at the Cambridge Hospital and one at the patient's home. Both were cases of the hæmorrhagic form of the disease.

In November four stations were opened for free vaccination, at which the following number of persons were vaccinated; —

East Cambridge	2258
Cambridgeport	2054
Old Cambridge	843
North Cambridge	638
Total	5793

EDWIN FARNHAM, M. D.

REPORT OF THE TRUSTEES OF THE BRIDGE CHARITABLE FUND

To the Honorable, the City Council: —

The Board herewith submits its annual report, it being the twenty-fifth since the establishment of the Fund: —

The amount on deposit in the Cambridgeport Savings Bank to the credit of the Fund on July 18, 1900, was	$3,929 63
Interest to July 18, 1901,	138 73
Amount of the Fund at the last named date	$4,068 36

The history of this Fund has been many times recited in annual City reports of former years. The sum which constituted the nucleus of the Fund was for some time prior to the year 1876, before the death of Mr. Levi Bridge the donor, in the custody of the late Hon. John Sargent, formerly Mayor of the City.

Mr. Bridge died in the year 1876, and in September of that year, under the terms of the bequest, the money then amounting to $773.95 was turned over to the City. By a provision of the will, it was required that on the decease of the testator, Hon. John Sargent as custodian of the money, should "pay over the principal and accrued interest of said money to the City of Cambridge, to be received and known as the 'Bridge Charitable Fund,' to be forever held by said City, upon this further trust: To add the interest of said fund to the principal until such times as said fund by the accruing of interest or by gifts from other philanthropic persons shall amount to two thousand dollars, after which time, one-third part of the interest of said fund shall be added to the principal annually forever, and the remaining two-thirds of such interest shall be paid over annually to the Overseers of the Poor, for the time being, to be by them expended for the deserving poor of the City of Cambridge, in such manner as they shall deem best."

On the twenty-fourth of January, 1877, the amount then in the Fund, was formally turned over to the City by Hon. John Sargent, who stated that it then amounted to $891.83. In performing the duty assigned to him Mr. Sargent took occasion to give an interesting account of Levi Bridge, and the history of the accumulation of the Fund. In October, 1877, and in furtherance of the wishes of the donor, as expressed in the

clause of the will before recited, another donation was made to the City by Mr. Samuel J. Bridge, a kinsman of the former, of a like sum of $891.83.

At the close of the year 1880, the amount of the fund had increased to $2,054.29 and the interest accumulations continued to be added, until in January, 1885, the amount had reached the sum of $2,412.76, being an excess of $412.76 over the limit of $2,000.00 named in the will. It appeared that the sum of $275.17 was due to the Overseers of the Poor, and the same was therefore withdrawn from the Fund by Mayor William E. Russell and placed to the credit of the Overseers of the Poor. Since this withdrawal, the Fund has accumulated by interest accretions, until it now amounts as before stated to the sum of $4,068.36 or $2,068.36 in excess of the $2,000.00 limit named in the bequest. It seems proper that two-thirds of the sum of $2,068.36 or $1,337.57 should be withdrawn from the Fund and paid over to the Overseers of the Poor. That this sum or whatever amount may be the correct one, be so withdrawn and paid, this Board would earnestly recommend. It was the cherished desire of the aged founder of this charity, that in the succeeding years other kindly disposed citizens should add their contributions to the sum that in after times the income thereto accruing, might be of material assistance to the deserving poor of Cambridge. Himself for a long period a sufferer from severe privations, he fully realized the hardships sustained by the poor, and his heart went out towards them with a far reaching benevolence, looking forward to distant generations. Following out the wishes of this humane giver, the Trustees would especially invite the attention of the good people of our City to the slowly accumulating Fund which perpetuates the name of Levi Bridge, with the further suggestion that an opportunity is here presented of rapidly increasing the amount by numerous small contributions so that its benefits may become immediately available.

Thus may we in some measure make smooth the ways and lift the burdens of the unfortunate yet deserving poor who "are always with us."

DAVID T. DICKINSON,
GEORGE E. SAUNDERS,
JOHN D. MERRILL,
} *Trustees of Bridge Charitable Fund.*

REPORT OF THE TRUSTEES OF THE SANDERS TEMPERANCE FUND

To the Honorable, the City Council : —

Under the requirements of the City Ordinances this Board herewith submits its annual report, it being the thirty-sixth since the establishment of this Fund.

The Ordinance in relation to the Fund is as follows : —

CHAPTER 33.

SANDERS TEMPERANCE FUND.

SECTION 1. The fund of ten thousand dollars, given to the city by the will of the late Charles Sanders, shall be called the Sanders Temperance Fund.

SECT. 2. The mayor, the president of the board of aldermen and the president of the common council, shall be the trustees of said fund.

SECT. 3. Said trustees shall have the care and management of said fund, and shall keep the same invested in notes of the city, with interest payable quarterly, at six per cent., to the order of the trustees; and they shall appoint an agent to be employed in the manner provided in the will of the donor of this fund, who shall receive his salary in equal quarterly payments from the trustees, and shall hold his office at their pleasure.

SECT. 4. The mayor shall be, *ex officio*, chairman of the board of trustees, and they shall keep a record of their doings, and annually, at the close of each financial year, make a report thereof to the city council.

The sum of $10,000.00, which constitutes this Fund, was bequeathed to the City by Charles Sanders in the year 1864. He was well known to the people of Cambridge of the last generation, having been for some years a resident of the City. His will, which is dated September 1, 1864, contains the following clause : —

"Believing as I do that drunkenness is a crime, and likewise the origin of a large portion of the crimes, vices and misery among us, I am desirous to do all in my power for its prevention and care by establishment in Gloucester the place of my ancestors, and in Cambridge my present place of residence, a permanent salary to be paid to some worthy man in each place, as has discretion and zeal for the cause, to be constantly employed as a missionary in the cause of temperance, in reforming old drunkards and preventing young drunkards, and abolishing as far as possible the use of all intoxicating articles. I therefore bequeath to the Town of Gloucester the sum of Ten Thousand Dollars ($10,000.00), and to the City of Cambridge the like sum of Ten Thousand Dollars ($10,000.00),

to be held as permanent funds, the interest of which shall be paid quarterly as salaries to those persons employed for the above named purposes in those places as long as the vice of drunkenness there exists."

Since the acceptance of this bequest by the City, various persons have acceptably served as missionaries.

Mr. James Hicks, who was appointed in 1896 upon the decease of Mr. Alonzo Stewart, has done efficient work, and seems to be inspired with all the feelings of the donor. He is well known as a zealous temperance advocate, and his earnest labors certainly promise the best results. His duties consist mainly of visits to families of the intemperate, counsel and encouragement to those trying to break from the evil habit, care and attention to the apparently hopeless inebriate, by interceding in his behalf in the courts and otherwise watching over him while he is under the baleful influence of the demon alcohol. His report which is attached hereto, tells its own story and strengthens the confidence heretofore reposed in him, and gives us renewed assurance of the faithfulness with which he has performed his duty.

DAVID T. DICKINSON,
GEORGE E. SAUNDERS,
JOHN D. MERRILL,
} *Trustees of Sanders Temperance Fund.*

December 26, 1901.

To the Trustees of the Sanders Temperance Fund : —

Gentlemen : —In accordance with your requirements and the custom of former years, I herewith present my report for the year 1901. It will differ little from former reports. Throughout the year I have labored with my mind bent on the reformation of the persons addicted to the use of intoxicating liquors and so far as it was possible, by my word and influence, prevented the young from forming the habit of using the forbidden beverage.

With God's blessing I have been rewarded in seeing many heads of families reformed from the use of that which was destructful to their homes and families. Amongst the number I can count many men who were outcasts from friends and society, who through the pledge of total abstinence, have become bright and shining lights in our City as workers in the cause of temperance. They themselves becoming missionaries to the companions they left behind.

I need hardly say the homes of these men have undergone a complete transformation. Old things have passed away and all things have become new. The church to which they belong is sought out and entered in

many cases for the first time in years. The children are regularly in attendance at the Sunday school.

The temperance meetings are sustained not only by the presence of the father, but the whole family.

Men can be reformed at all ages. I know of two men in our City who did not take their pledge until over sixty years of age, both have kept it for over fifteen years and they drank liquor for over forty years.

A young man who served several terms in prison for no other crime than drunkenness writes me, "I am now keeping my pledge for over a year. I never intend touching the intoxicating cup again. I hold a good and responsible situation," concluding his letter with words of gratitude. Many such letters come to me in the course of a year from just such men.

THIRD DISTRICT COURT.

I attend daily the sessions of the Court, the open door which leads me into the homes of the unfortunate and needy. I have met during the year the young as well as the old in trouble through strong drink. I have spoken to many of them brought before the Court, on the subject of drunkenness and its results, and wherever I found what appeared to me an honest purpose to reform I have pleaded with the Court that an opportunity be given, promising whatever aid I could extend in order that the man should overcome his habit. With the Court I have always been successful, and in many cases the men worked with have shown their sincerity by giving up entirely all kinds of intoxicating liquors.

I have made a great many visits during the year to the homes laid waste and almost desolate through the neglect to provide by the head of the family. In some of these homes I found from one to six children sometimes without fuel, sometimes without food in the home. I have ministered in such cases as best I could and where I failed to be of service I have called the attention of the Society for the Prevention of Cruelty to Children to the situation, and so have been able, during the year, to render service to many helpless children. I have got several who had no homes or whose parents could not care for them, into homes where they are being cared for. This work I did under the auspices of the Children's Society.

PUBLIC TEMPERANCE MEETINGS.

There are five public temperance meetings held in the City every week. These meetings are officered by reformed men and are always well attended. At these meetings and other places over one thousand persons have taken the pledge. I have been present at two hundred and forty (240) of the gatherings named and spoke.

VISITS MADE.

I have made over two thousand visits, mostly to sad and blighted homes. I have tried always to impart hope to these dispairing ones. I met and rendered whatever other aid it was in my power to bestow.

HOUSE OF CORRECTION.

I have made many visits to individual prisoners. Collected many thousand of pages of literature, which has been given the prisoners to read. I have also attended the services in the chapel on Sunday mornings regularly and in a general way do what I could to encourage and help the unfortunate undergoing confinement.

CAST-OFF CLOTHING.

Last year, through the kindness of Christian friends, I got together many garments for the poor, from which I was enabled to assist over one hundred needy families. The good work goes on this year and by God's blessing I hope to make many of our needy deserving ones happy.

NO-LICENSE.

Thanks be unto God who has given us as a City such a great victory over the liquor traffic. The large majority for no-license at our late election goes to show our strength as a temperance City.

Home is safe. Our young people protected and our reformed men who are fighting their deadly enemy from day to day will not have the saloon to tempt them in, and draw them back to their cups.

In conclusion I can only say, I will continue in the future as in the past, sowing good seed, doing my humble work in the name of the Divine Master. The harvest is promised to the faithful laborer.

Though we sow in tears sometimes we shall reap in joy.

Respectfully submitted,

JAMES HICKS,
Missionary, Sanders Temperance Fund.

CITY CLERK'S REPORT OF FEES AND LICENSES

OFFICE OF THE CITY CLERK,
December 2, 1901.

To the Honorable, the City Council of the City of Cambridge:—

The undersigned herewith presents an account of the sums received for fees and licenses during the year ending November 30, 1901.

Auctioneers' Licenses	$62 00
Pool, Bowling Alley and Billiard Licenses	70 00
Wagon and Carriage Licenses	275 00
Intelligence Office Licenses	56 00
Junk Store and Collectors' Licenses	572 00
Recording Mortgages, Assignments, etc.	437 50
Marriage Certificates	535 00
Certified Copies from Records	99 80
Fees from Dog Licenses	429 60
Fees from Liquor Licenses	46 00
Fees from Fireworks Licenses	122 00
Fees from Peddlers' Licenses	36 00
Sundries	11 00
Total	$2,751 90

The foregoing amount has been paid into the City Treasury.

The receipts from Dog Licenses have been $5,309.00. Of this amount, the City Clerk's fee (20 cents for each license issued), amounting to the sum of $429.60, is included in the above list of fees, and the balance, amounting to $4,879.40, has been paid the County Treasurer.

Respectfully submitted,

EDWARD J. BRANDON,
City Clerk.

REPORT OF THE CITY MESSENGER

OFFICE OF THE CITY MESSENGER,
November 30, 1901.

To the Honorable, the City Council: —

GENTLEMEN: — In compliance with the Ordinance relating to the purchase and delivery of stationery, the City Messenger has the honor to submit his annual report: —

Stock of stationery on hand December 1, 1900,	$433 05
Purchased during the year	995 82
	$1,428 87

Delivered to heads of departments as follows: —

Street Department	$72 49
Engineering Department	31 85
Auditor's Department	17 37
Treasurer's Department	38 65
Police Department	57 20
Fire Department	6 28
Milk Inspector's Department	12 87
Superintendent Public Buildings Department	33 80
Soldiers' Aid Department	14 23
Law Department	39 05
Executive Department	108 21
Election Expenses	54 26
Sealer Weights and Measures	7 88
Registrars of Voters	17 47
Park Department	57 75
Sewer Department	14 23
Board of Health	13 30
Electrical Department	24 23
City Messenger's Department	97 35
Assessors' Department	103 20
Clerk of Committees Department	112 45
City Clerk's Department	146 63
Contingent Fund	11 67
Stock of stationery on hand December 1, 1901	338 45
	$1,428 87

Respectfully submitted,

FRANCIS L. PRATT,
City Messenger.

ANNUAL REPORT OF OVERSEERS OF POOR

CENTRAL SQUARE BUILDING,
CAMBRIDGE, December 23, 1901.

To the Honorable, the City Council of the City of Cambridge: —

GENTLEMEN: — The Overseers of the Poor present their twenty-fourth annual report for the year ending November 30, 1901.

Several changes in the membership of the Board have occurred during the year.

On January 29, 1901, Cornelius Minihan, who was elected by the City Council on May 22, 1900, to fill the vacancy caused by the decease of Stephen Anderson, resigned his membership of the Board.

On February 5th, at a convention of the City Council, John T. Shea was elected to fill the vacancy caused by the resignation of Cornelius Minihan, whose term would have expired on May 1, 1902.

William W. Burrage, who was first chosen by the City Council, as an Overseer of the Poor on June 10, 1890, to fill a vacancy caused by the resignation of Sumner Albee, died on March 6, 1901, having been a member since his first election.

A special meeting of the Board was held on March 7th to take action upon the event, and a committee was appointed to prepare suitable resolutions of respect to his memory. The Board also voted to attend the funeral services of the deceased.

The Committee reported on March 14th the following expression of the Board, which was unanimously adopted, viz.: —

"We, the Overseers of the Poor of the City of Cambridge, deeply feel that in the death of William W. Burrage, one of our oldest members, we have sustained a great loss, and grievously recognize the fact that his death has made a vacancy in our Board that but few are fitted to fill.

Throughout his long intercourse with us and with every one, he was uniformly modest, courteous and kind, never treating the opinions of others with disrespect, but always dealing charitably with those with whom he found himself unable to agree.

He was a wise counselor and a faithful friend. While he was retiring and lowly in spirit, he was ever energetic, prompt, strictly attentive and thoroughly loyal to duty.

By these traits his life continually reminded us that a public official is most honored, not by that which a City does for him, but by that which he does for the City.

It would be his natural desire that he should not be thus openly praised; yet we cannot refrain from laying upon his altar our loving tribute to the excellence of his character.

He has finished his work on earth, and we shall see him no more at our gatherings; but the influence of his life will long continue with us, ever unfolding in fragrant and tender memories of the past.

We direct the secretary of this Board to enter this expression of our sentiments on our records, and to send a copy of it to the near relatives and friends of Mr. Burrage, together with our heartfelt sympathy and condolence for them in this their sad bereavement."

At a joint convention of the two branches of the City Council on March 19th, Charles James was elected to fill the vacancy caused by the decease of William W. Burrage.

At a joint convention of the two branches of the City Council on March 19th, Charles Walker—who was first chosen a member March, 1886, and who has served continuously since that time—was re-elected a member of the Board for the term of five years.

On September 30th, Vespasian Danforth resigned his position as assistant to the secretary, after a service as Visitor of the Board from November 1, 1877, to May 1, 1899, and as assistant to the secretary since that time up to September 30, 1901.

At a special meeting of the Board held on October 4th, the following action was taken, viz.: —

"A communication was received from Mr. Vespasian Danforth tendering his resignation as Assistant Secretary to the Board of Overseers of the Poor after a service of nearly a quarter of a century.

The Board accepted his resignation, and, considering the very long and faithful services rendered in the past, the members of the Board, one and all, desire to express their appreciation of the same, and the hope that he may have many years of happiness and prosperity in his new home in California where he is to take up his residence, and to extend to him the best wishes of the entire Board."

During the year the Overseers of the Poor have received several bills containing charges for treatment of poor patients, in various hospitals and homes, who have been afflicted with contagious diseases. On September 9th the Board adopted the following resolution, viz.: —

"*Resolved*, That in the opinion of the Overseers of the Poor, the expenses incurred in contagious diseases contracted by persons having a settlement and cared for by the Board of Health of other cities and towns, should not be paid by this Board of Overseers, because our payment of the expense pauperizes the sick and other members of the family."

In accordance with this opinion, these bills were referred to the Mayor who addressed a communication to the City Council, recommending

that these charges be so placed as not to pauperize the persons afflicted with these diseases.

On January 15th, estimates for 1901, having been prepared by the Board, were sent to the City Council, which made the following appropriations, viz. : —

Outside aid	$52,000 00
City Home	21,500 00
Farm	5,000 00
House Offal	26,000 00
	$104,500 00

On July 23d, a special appropriation of $1,200.00 was made by the City Council for the purpose of building fire escapes for the City Home, and the improvement of the hospital accommodation for the female patients. The former have been furnished by Jonas F. Capelle, the contractor, to the acceptance of the Superintendent of Public Buildings.

The following were the actual expenditures and receipts for the year, viz. :—

OUTSIDE AID.

Expenditures	$50,086 83
Receipts	4,076 88
Net cost	$46,009 95

CITY HOME.

Expenditures	$22,434 44
Receipts	876 92
Net cost	$21,557 52

FARM.

Expenditures	$4,992 91
Receipts	5,173 83
Net gain	$180 92

CITY PHYSICIAN.

Expenditures	$1,500 00

HOUSE OFFAL

Expenditures	$27,615 49
Receipts	8,016 71
Net cost	$19,598 78

During the year the number of persons at institutions for whom the City has been liable is as follows, viz. :—

City Home	144
Imbecile, 1; blind, 3; epileptic, 4; insane, 7; deaf mute, 1; all others, 128.	
State Insane Hospitals	200
State Hospital, insane, 15; paupers, 38	53
State Farm, insane, 5; paupers, 1	6
Insane in families, 4 females, 1 male	5
State Hospital for Epileptics	10
State Hospital for Dipsomaniacs	19
Massachusetts School for Feeble-minded	14
Baldwinville Hospital Cottages for Children	3
	454

There were thirteen at the Danvers Insane Hospital, ninety-three at the Worcester Insane Hospital, eighteen at the Worcester Insane Asylum, two at the Taunton Insane Hospital, one at the Northampton Insane Hospital, twenty-two at the Westboro Insane Hospital, nineteen at the Foxboro Dipsomaniac Hospital, fifty-one at the Medfield Insane Asylum, ten at the Monson Epileptic Hospital, fifteen in the insane ward at the State Hospital at Tewksbury, and five in the insane ward at the State Farm at Bridgewater. Four insane females and one insane male have been boarded in families, all under the supervision of the State Board of Insanity. There have been seven mildly insane cases at the Cambridge City Home in addition to the other insane supported by the City.

The amount paid to the State Insane Hospitals, State Hospital at Tewksbury, State Farm at Bridgewater, and private families for the 254 insane, has been $31,991.39, which is $791.49 more than last year.

The relatives and families of the insane have paid $2,845.01 into the City treasury, and other persons have paid $124.07. Other cities and towns have reimbursed the City to the amount of $558.68 for aid rendered their poor living in Cambridge. The State Treasurer has paid $551.12 for support of cases having no settlement which were aided from the office of the Board.

There have been 325 histories taken of new applicants for relief.

The City Physician has made 1201 visits upon 170 patients at the City Home, and he has also made 778 visits upon 454 patients outside of the institution. There were eighty-six examinations as to sanity and sixty-six certificates of insanity, dipsomania or epilepsy issued from his office. There has been paid from the Overseers of the Poor appropriation $145.51 for Outside Aid medicines and $218.32 for City Home medicines; $29.25 have been paid for Outside Aid surgical appliances, and $29.87 at the City Home; $106.00 have been paid for Outside additional medical service and $10.00 for additional City Home medical service. There were twenty-three deaths at the City Home. Sixty-seven sick persons were sent to the hospitals. Twenty-seven persons have received burial in the Cambridge Cemetery on Outside Aid account, at an expense of $272.05, and thirteen persons on the City Home account, at an expense of $133.95 for undertaker's service and interment.

There have been 144 inmates in the City Home during the year, and there remained eighty-three persons on November 30, 1901.

There have been 104 families, embracing 292 persons aided from the office of the Board during the past year. Twenty-six of these families lived in Wards 1 and 5, embracing fourty-four persons, the population being 29,358. In Wards 2 and 4 there were fifty-nine families relieved, consisting of 172 persons, the population being 49,873. In Ward 3 there

were nineteen families assisted, including seventy-six persons, the population being 13,555. The total population of the City was 92,788, as estimated from figures furnished from the office of the City Clerk.

RECAPITULATION.

Total expenditures for Outside Aid, City Home, Farm	$77,514 18
Receipts for the same	10,127 63
Net cost of care of the poor	$67,386 55

Respectfully submitted,

CHARLES WALKER, *Ward 4,*
(*Chairman.*)
ALEXANDER MILLAN, *Ward 1.*
CHARLES JAMES, *Ward 2.*
JOHN T. SHEA, *Ward 3.*
CHARLES BULLOCK, *Ward 5.*

REPORT OF THE SUPERINTENDENT OF THE CITY HOME

CAMBRIDGE, December 1, 1901.

To the Overseers of the Poor : —

GENTLEMEN : — The annual report of the Cambridge City Home for the year ending November 30, 1901, is herewith respectfully submitted.

The whole number in the Home during the year has been as follows :—

Males	72
Females	72
Total	144
Adults	131
Minors	13
Whole number in the Home, November 30, 1901	83
Average number during the year	83

Included in the whole number in the Home, November 30, 1901, there are : —

INSANE OR DEMENTED.

Males	1
Females	6
Total	7

IDIOTIC OR IMBECILE.

Males	1
Females	1
Total	2

BLIND.

Males	1
Females	2
Total	3

EPILEPTIC.

Males	2
Females	2
Total	4

DEAF MUTES.

Males	1
Females	0
Total	1

Included in the whole number discharged during the year are eighteen persons sent to other institutions as follows:—

To Board of State Charities	1
Boston Almshouse	1
Cambridge Hospital	1
Carney Hospital	1
Holy Ghost Hospital	2
Massachusetts Charitable Eye and Ear Infirmary	1
Massachusetts General Hospital	1
Massachusetts Home for Intemperate Women	1
Massachusetts Hospital for Epileptics	1
Soldiers' Home, Togus, Me.	1
State Hospital	5
Worcester Insane Hospital	2

Remaining in the Home November 30, 1901:—

Males	39
Females	44
Adults	77
Minors, 3 boys, 3 girls	6

All statistics of general interest will be exhibited by the following tables:—

TABLE I.

Showing the number and sex of adult persons and minors of all classes received into the Cambridge City Home in each month of the year ending November 30, 1901.

Months.	Adults.		Minors.		Total.	Dependent Children.		Neglected Children.	
1900.	M.	F.	M.	F.		M.	F.	M.	F.
December	3	1	0	0	4	0	0	0	0
1901.									
January	2	5	1	1	9	1	1	0	0
February	3	1	2	2	8	2	2	0	0
March	3	2	0	0	5	0	0	0	0
April	4	3	0	0	7	0	0	0	0
May	0	2	0	0	2	0	0	0	0
June	1	1	0	0	2	0	0	0	0
July	2	3	0	0	5	0	0	0	0
August	1	0	0	0	1	0	0	0	0
September	1	3	0	1	5	0	1	0	0
October	4	0	1	0	5	1	0	0	0
November	4	4	0	2	10	0	2	0	0
Totals	28	25	4	6	63	4	6	0	0

TABLE II.

Showing the number and sex of adult persons and minors of all classes discharged from the Cambridge City Home in each month of the year ending November 30, 1901.

Months.	Adults.		Minors.		Total.	Dependent Children.		Neglected Children.	
1900.	M.	F.	M.	F.		M.	F.	M.	F.
December	4	0	0	0	4	0	0	0	0
1901.									
January	1	2	0	0	3	0	0	0	0
February	1	2	0	1	4	0	1	0	0
March	5	5	0	1	11	0	1	0	0
April	1	1	2	1	5	2	1	0	0
May	5	4	0	0	9	0	0	0	0
June	0	3	1	0	4	1	0	0	0
July	1	2	0	0	3	0	0	0	0
August	4	0	0	0	4	0	0	0	0
September	2	1	0	1	4	0	1	0	0
October	4	2	0	0	6	0	0	0	0
November	2	3	0	0	5	0	0	0	0
Totals	30	25	3	4	62	3	4	0	0

TABLE III.

Showing the name, age, date of admission, date and cause of death of each person who has died in the Cambridge City Home during the year ending November 30, 1901.

Name.	Age.	Date of Admission.	Date of Death.	Cause of Death.
Mary Doran	39	Jan. 26, 1901	Jan 29, 1901	Apoplexy.
Ellen McCarthy	54	Jan. 9, 1900	Feb. 4, 1901	Cancer.
Elizabeth Crowley	67	Dec. 14, 1899	Feb. 27, 1901	[Shock. Senile Debility and Physical
Eliza Toner	82	Jan. 7, 1901	Mar. 8, 1901	Gangrene.
Margery R. Morrill	86	Mar. 2, 1901	Mar. 9, 1901	Senile Debility.
Daniel Manley	71	May 22, 1899	Mar. 15, 1901	Consumption.
Mary L. Jones	73	April 15, 1898	Mar. 24, 1901	Paralysis and SenileDebility.
John McKinnon	65	Jan. 17, 1898	Mar. 30, 1901	Apoplexy.
Arthur D. Ballard	27	April 18, 1901	May 9, 1901	Consumption.
Mary E. Garrity	37	May 25, 1901	May 30, 1901	Pulmonary Consumption.
Jane L. Morgan	50	April 30, 1886	June 4, 1901	Pneumonia.
Frances Peel	86	July 19, 1890	July 16, 1901	Senile Debility.
Ellen Burns	94	April 6, 1882	July 17, 1901	Senile Debility.
Jeremiah Noonan	61	Oct. 7, 1895	Aug. 2, 1901	Consumption.
Thomas Griffin	27	April 9, 1900	Aug. 3, 1901	Tuberculosis.
Charles W. Tates	83	April 7, 1892	Aug. 13, 1901	Senile Debility.
John P. Brennan	46	July 17, 1901	Sept 24, 1901	Tubercnlosis.
Mary King	71	Jan. 16, 1901	Oct. 7, 1901	Malignant Disease.
Ellen Buckley	55	Nov. 20, 1891	Oct. 10, 1901	Consumption.
John James	56	Aug. 30, 1901	Oct. 16, 1901	Dropsy.
James Lacey	62	Oct. 30, 1901	Nov 6, 1901	Cirrhosis of Liver.
Sarah E. McKenna	71	Oct. 30, 1895	Nov. 27, 1901	Gangrene.
Bridget Kelliher	80	Dec. 26, 1899	Nov. 29, 1901	Apoplexy and Senile Debility

PRODUCTS OF THE FARM WITH THEIR APPROXIMATE VALUES.

530 bushels string beans	$300 00
150 bushels beets	80 00
150 dozen bunches beets	85 00
14,000 cabbages	480 00
175 bushels carrots	70 00
600 boxes celery	1,950 00
16,000 cucumbers	250 00
840 bushels dandelions	240 00
640 dozen eggs	170 00
120 fowls	60 00
1,900 dozen lettuce	540 00
6,000 quarts milk	300 00
300 bushels onions	190 00
350 bushels parsnips	210 00
20 bushels peas	30 00
1,100 pounds pie-plant	30 00
12 bushels peppers	9 00
7,780 pounds pork	539 56
690 dozen radishes	225 00
100 bushels spinach	25 00
60 dozen summer squashes	30 00
100 bushels Swiss chard	20 00
510 bushels tomatoes	330 00
	$6,163 56

COMPARATIVE TABLE OF ALMSHOUSE, FARM, LEDGE, AND HOUSE OFFAL RECEIPTS FOR TWENTY-ONE YEARS ENDING NOVEMBER 30, 1901.

Years.	Board.	Chair Shop.	Farm.	General Sales.	Stone.	House Offal.	Totals.
1881	$322 56	.....	$378 50	.....	$2,529 01	$5,536 88	$8,766 95
1882	705 34	.....	436 54	.....	2,626 17	5,705 22	9,473 27
1883	1,174 96	.....	476 22	$14 19	2,622 00	5,819 55	10,106 92
1884	1,480 93	.....	316 76	.....	4,238 77	6,449 96	12 486 42
1885	2,035 58	.....	335 32	149 85	4,509 84	7,354 26	14.384 95
1886	613 93	$37 50	772 14	319 75	5,611 38	6,926 23	14,280 93
1887	514 64	634 19	1,595 10	241 37	4,684 14	6,856 59	14,526 03
1888	557 28	614 94	2,846 52	213 62	6,662 26	6,721 50	17,617 86
1889	274 84	479 28	3,684 59	144 36	5,564 18	7,324 61	17,471 06
1890	302 49	794 36	4,364 03	150 89	5.651 38	7,386 33	18,649 48
1891	1,201 33	844 62	5,213 68	161 71	6,107 86	7,716 77	21,245 97
1892	1,253 06	899 81	5,371 60	166 45	5,220 50	7,535 57	20,447 55
1893	703 70	325 86	6,400 64	210 09	5,826 74	7,033 52	20,500 05
1894	1,094 89	220 07	6,504 66	615 69	7,955 42	8,218 96	24,609 69
1895	622 77	77 00	6,512 63	160 19	8,265 14	9,045 55	24,682 78
1896	834 52	61 25	5.623 67	147 02	7,639 48	9,155 35	23,461 24
1897	1,294 65	3 60	5,348 47	137 33	10,335 16	7,228 79	24,348 00
1898	1,038 19	.....	5,730 13	277 40	2,172 60	7,264 09	16,482 41
1899	703 17	.....	6,049 47	142 54	.....	6,997 40	13.892 58
1900	611 57	.....	5,082 43	137 40	.....	7,322 05	13,153 45
1901	793 32	.....	5,173 83	83 60	.....	8,016 71	14,067 46
Totals	$18,133 72	$4,992 48	$78,216 93	$3,473 45	$98,222 03	$151,615 89	$354,655 05

It will be seen by reference to Table III. that the average age of the twenty-three persons who have died during the past year, was a little less than sixty-two and three quarters years.

Two were under thirty, two between thirty and forty, one between forty and fifty, four between fifty and sixty, four between sixty and seventy, four between seventy and eighty, five between eighty and ninety, and one was more than ninety.

The fact of the great age at which a majority of these persons have died, if considered in connection with a careful examination of the column marked "causes of death," suggests, we think, the excellent sanitary condition of the Home, the fidelity of our nurses, and the wisdom and carefulness of medical supervision and treatment.

The hospital cottage built in 1886 and situated at a considerable distance from the Home, has been moved to the immediate vicinity of our main building and placed over a commodious cellar. It has been thoroughly repaired and renovated, and will be used in connection with the women's hospital.

A moderate expenditure will be required for the proper re-furnishing of the pleasant rooms it contains, now made available for the better care of our increasing hospital population.

Our wornout laundry has been torn down, and all the available lumber of its construction has been used in the erection of a new building, very carefully planned, properly trapped and connected with the City sewer. As much of the labor employed on this building was furnished by our own people this department has secured a laundry with modern equipments, nearly perfect in all its appointments at a comparatively small outlay.

The relative cost of the offal department as compared with the previous year, is shown by the following percentages: The amount of offal collected the past year is seven per cent greater than the amount collected the previous year; the total cost of the department is six per cent greater, and the cash receipts are more than nine per cent greater than for the previous year.

Under existing conditions we can hardly expect much profit from the farm. But if the amount of our annual cash sales of farm products, which is turned into the City treasury, shall continue to exceed the amount of the annual appropriation made for the management of the farm, it is certain that the farm will lay no burden on the City, and we must be content to receive our profits, mainly, in the shape of an ample supply of fresh vegetables, milk, eggs and fowls for our large family.

In closing this report I desire to record my sense of deep obligation to the members of your Board for valuable advice and assistance, to the clergymen of the City for the maintenance of religious services on Sunday; to the entertainment groups of Harvard students, the Cantabrigia Club and others for pleasant entertainments for our people, to the River-

side Press and many private individuals for most acceptable reading matter, to all officers and employees for fidelity of service, and to the general public for kind interest and helpful sympathy in conducting the affairs of an important and useful public charity.

Respectfully submitted,

MARTIN L. ELDRIDGE,
Superintendent.

REPORT OF THE CITY PHYSICIAN

CAMBRIDGE, November 30, 1901.

To the Honorable, the City Council of the City of Cambridge: —

GENTLEMEN: — In accordance with the requirements of Chapter 45 of the revised ordinances of 1892, a report of the doings of this office for the year ending November 30, 1901, is hereby rendered: —

CITY HOME.

Number of visits to the City Home	149
Number of persons treated therein	169
Number of professional visits to the same	1,200
Number of births	2
Number of deaths at the City Home	23
Cost of medicines and surgical appliances furnished	$248.19

OUTSIDE AID.

Number of persons attended for the Overseers of the Poor	348
Number of professional visits to same	778
Number of examinations as to insanity	86
Number of certificates of insanity issued	54
Number sent to hospitals for treatment	67
Number of deaths	3
Cost of medicines and surgical appliances furnished	$174.76

DEPARTMENTAL SERVICE AND TOTALS.

Number of persons visited at the police stations	45
Number of civil service examinations	31
Number of persons examined for the Law Department	38
Number of employees examined for injuries received	29
Number of vaccinations for the school and health departments	827
Total number of persons receiving professional attention	1,458
Total number of visits to same	2,919
Total number of deaths	26
Total amount expended for medicines and surgical appliances	$422.95

Respectfully,

LEWIS L. BRYANT,
City Physician.

REPORT OF THE COMMISSIONER FOR THE BOSTON AND CAMBRIDGE BRIDGES

CAMBRIDGE, MASS., December 10, 1901.

To the Honorable, the Mayor, and City Council of the City of Cambridge:—

SIRS, — The Commissioner for the Boston and Cambridge Bridges, having the charge of the Harvard, West Boston, Craigie, Prison Point, Brookline Street, River Street, Western Avenue, and North Harvard Street Bridges, submits his annual report of the matters pertaining to said bridges.

HARVARD BRIDGE.

The roadway of Harvard Bridge was in very bad condition and had to be looked after very carefully. Heavy teams several times broke through the sheathing and deck, and in one instance it was necessary to use jacks to get the team out. The sheathing was from time to time repaired, and almost the entire surface was renewed.

Heretofore the roadway of the bridge has had to be sheathed with two-inch plank once a year, and besides a great deal of patching has had to be done, as after six months it was badly worn and splinters from the plank were a source of annoyance to the public.

The traffic over the bridge has increased every year, and now it is so enormous that if the old surface was to be continued it would have been necessary to sheathe the roadway twice a year, costing about six thousand five hundred dollars yearly. When the bridge was first built only horse cars were in use and timbers of sufficient strength to carry them were used, but now that electric cars are used heavier timbers were required under the rails.

The floor of the bridge was in such bad condition that the Commissioners deemed it necessary to give the bridge a thorough repairing. The Boston Elevated Railway Company placed large timbers under its tracks for the entire length of the bridge, and under the rest of the roadway many decayed stringers were taken out and new ones put in their place. All of the old and new stringers were coated with Cabot's Conservo to preserve the wood. The old decking on the stringers was of

four-inch spruce and somewhat decayed, having been in place thirteen years. This was removed and replaced with three-inch hard pine, treated with creo-resinate, which we think will last many years. While the bridge was uncovered the iron work where it could not be got at any other way was painted.

The new wooden block paving is of creo-resinate wooden blocks four inches deep. The blocks are treated as follows: —

They are to be placed in an air-tight cylinder, and when the doors are closed the dry heat is to be raised to 215 degrees Fahrenheit, without pressure, for one hour, for the purpose of getting rid of the moisture. Then the heat is to be increased, pressure is to be applied, and both are to be raised gradually to avoid injury to the fibre, for two hours, until the heat has reached about 285 degrees and the pressure about 90 pounds, and both are to be held there for one hour. The heat is then to be shut off and the tanks are to be allowed to cool gradually for one hour. At the end of this time the heat is to be reduced to 250 degrees and the pressure to about 40 pounds. The pressure is then to be blown off and the heat still further reduced. Vacuum is then to be applied until about 26 inches is reached, and while under vacuum the creo-resinate mixture is to be run into the cylinders at a temperature of 175 to 200 degrees, and hydraulic pressure is to be applied reaching 200 pounds per square inch, and kept at this point until 21 to 22 pounds of mixture per cubic foot has been absorbed. The liquid is then to be run off and the wood is to be placed in another cylinder, and milk of lime at a temperature of about 150 degrees is to be run in, and hydraulic pressure of about 200 pounds is to be applied for from one-half to one hour.

The blocks are to be laid close, with the grain vertical, upon the planking, and at such an angle to the curb as may be directed by the Commissioners, and are to be driven together as tightly as possible at every sixth row. Proper expansion joints are to be provided at curbs.

The joints are to be filled with dry screened sand and rammed or rolled until the blocks present a firm, uniform and unyielding surface. The joints are then to be filled with creo-resinate mixture heated to 300 degrees Fahrenheit and poured as nearly as practicable at that temperature.

The surface of the paving when completed is to be covered with one quarter inch deep dressing of clean screened sharp sand, or crushed stone screenings.

The work that was done to strengthen the floor of the bridge and to put new decking down, would have had to be done whether the floor was sheathed or paved with blocks. Between the yearly cost of planking and the yearly interest on the cost of paving we expect to make quite a saving each year.

The asphalt sidewalks are very much broken up; they should be removed and replaced with hard pine plank two inches thick.

The electric lights on the bridge are giving good satisfaction. Draw-tenders do all ordinary repairs, clean the sidewalks from snow and ice, clean the globes used on electric lights, etc. Bridge has been cleaned twice a week. We expect with the paving now in use we will have less cleaning to do.

By giving the amount of travel over the bridge in one day, it shows the benefit the public derives from it. Between the hours of 6.45 A. M. and 7.45 A. M. 118 cars pass over the bridge, and from 4 P. M. to 5 P. M. the same number cross over. For the rest of the day the average is 60 cars per hour.

NUMBER OF TEAMS CROSSING HARVARD BRIDGE DECEMBER 13, 1901.

	Teams to Boston.	Teams to Cambridge.
6 to 7 A. M.	45	10
7 to 8 A. M.	140	25
8 to 9 A. M.	53	25
9 to 10 A. M.	105	55
10 to 11 A. M.	90	55
11 to 12 A. M.	65	67
12 to 1 P. M.	45	61
1 to 2 P. M.	40	50
2 to 3 P. M.	71	110
3 to 4 P. M.	70	105
4 to 5 P. M.	90	120
5 to 6 P. M.	45	125
6 to 7 P. M.	62	91
Totals,	921	899
		921
Grand total,		1,820

It being a dull day and raining, there were not so many teams as on a pleasant day. On a pleasant day the number would be from 2,000 to 2,400 teams.

This bridge is two thousand and seventeen feet long; draw one hundred and forty-nine feet long; width of bridge over all seventy-two feet width of draw over all fifty feet.

WEST BOSTON OR TEMPORARY BRIDGE.

Moved draw-tender's house from near the draw of old West Boston Bridge towards the draw of temporary bridge. The position it was in interferred with the work of the contractors on the new Cambridge bridge.

Had new bolts and washers put on all the timbers the whole length of the under side of the bridge, repaired the roadway and sheathed the entire surface of the bridge. Made a new dolphin to protect the bridge by driving five oak piles and bolting them together.

Draw-tenders do all ordinary repairs and sweep the piers and sidewalks and keep them free from snow and ice. The surface of the bridge is cleaned every week.

CRAIGIE BRIDGE.

Built a new draw pier; the old one was so broken up that it was unsafe. Drove new oak piles, placed hard pine timber in position, and covered the surface with two-inch hard pine plank, and sheathed the water-ways with three-inch spruce plank. Shingled the house occupied by draw-tender; put new end to house on Cambridge side of draw; repaired draw by placing hard pine timber under it, and laid new decking and sheathed the surface.

This draw is about all worn out. It requires constant care to keep it in position so as to keep cars and teams moving over it; it is old and narrow. There are about eight thousand teams passing over the bridge every day. When the new Cambridge Bridge is built there will have to be a new bridge built to take the place of this old one.

Repaired paving from the draw to the Cambridge end of bridge.

Next year the bridge will need a new bulkhead and sidewalk, ten hundred and sixty feet long, costing eight thousand dollars; repairs on bulkhead Cambridge side, costing five thousand dollars; a new hard pine deck and sheathing to be put on draw.

The bridge has been cleaned once a week. Draw-tenders do all ordinary repairs, sweep sidewalks and piers and keep them free from ice and snow.

PRISON POINT BRIDGE.

Shingled the house occupied by draw-tender, and laid new hard pine floor in house; repaired bridge and draw, and sheathed them; put in frame and window to house.

The draw and bridge require constant care to keep them safe for travel. The traffic over it is increasing. A great amount of freight from cars, a large number of ice teams and brick teams are constantly passing

over it every day. It is the only direct route from Cambridge to Charlestown, and freight sheds to Boston. If this bridge had to be closed for any length of time, it would cost teamsters and others that drive over it hundreds of dollars every week, for they would either have to go to Boston or Somerville to get into Charlestown from Cambridge, or from Charlestown to Cambridge, two or three miles out of their way.

It is believed that the Boston and Maine Railroad Company are going to commence this next spring to build the overhead street from Cambridge to Charlestown. At the present time, the street there is very dangerous from so many steam cars passing over it. It also delays travel very much.

Draw-tenders do all ordinary sweeping and cleaning snow from bridge and piers.

BROOKLINE STREET BRIDGE.

Sheathed the roadway about the whole length of the bridge; repaired sidewalk by putting new stringers under planking, and repairs were made on other parts of the bridge.

Draw-tenders sweep the bridge every week and keep the sidewalks free from snow and ice, and do all ordinary repairs.

RIVER STREET BRIDGE.

Put new decking where the old was decayed, and sheathed the surface with two-inch spruce plank; painted the houses on the pier; carted from Harvard Bridge four-inch hard pine plank that was taken out to make room for larger timbers, to be used on this bridge for decking.

Draw-tenders sweep the bridge every week and in winter remove snow and ice from sidewalks and piers.

WESTERN AVENUE BRIDGE.

Put in a new guard by driving oak piles, and spur-shores firmly bolted to piles and capped with hard pine timber. Repaired under planking on bridge and sheathed where necessary.

The draw-tenders on this bridge perform the same duties they do on River Street Bridge, they having the care of both bridges.

NORTH HARVARD BRIDGE.

The decking of this bridge was very much decayed; we removed all of it and put in four-inch plank (some of this brought from Harvard Bridge) and covered the whole surface with two-inch sheathing plank. We found bulkhead timbers very rotten, replaced them by putting in new

timbers, placed new guards in position, put new posts in fence and secured them to guards with iron braces. The draw was thoroughly repaired. Some of the piles to support the bridge were decayed, the upper part of them was cut off and spliced with new material. Part of braces or spur-shores to keep the bridge in position had to be sawed off and bolted to piles. The bridge structure is now in fair condition.

This bridge is an old and narrow one, and not in keeping with the surroundings. There ought to be erected at once an iron bridge, as wide as the avenues now on each side of the present bridge. This location is a very fine one and it would be a good idea if some public-spirited man with means would erect a memorial bridge, naming it either Longfellow, Lowell, or after our popular President Eliot of Harvard University. The site of this bridge is where the first bridge was built to cross over from Cambridge to Boston by the way of Brighton. There is a stone in position in the old burial ground at Garden Street with the inscription "Eight miles to Boston." Year 1734.

The amount of revenue received for rents, dockage, etc., during the year has been $780, one-half of which, $390, has been paid to each city.

The appropriation for the year was $18,400; expended, $17,946.43; leaving unexpended $453.57.

Respectfully,

WILLIAM J. MARVIN,

Commissioner of Boston and Cambridge Bridges and Harbor Master for Cambridge

NUMBER OF TIMES THE DRAWS IN THE BOSTON AND CAMBRIDGE BRIDGES HAVE BEEN OPENED, AND THE NUMBER OF VESSELS WHICH HAVE PASSED THROUGH FOR THE YEAR BEGINNING DECEMBER 1, 1900, AND ENDING NOVEMBER 30, 1901.

Date.	Canal or Craigie's.		Harvard		Prison Point.		West Boston.		River Street.		Brookline Street.		Boylston Street.		Western Avenue.	
	No. of Draw Openings.	No. of Vessels Passing Through.	No. of Draw Openings.	No. of Vessels Passing Through.	No. of Draw Openings.	No. of Vessels Passing Through.	No. of Draw Openings.	No. of Vessels Passing Through.	No. of Draw Openings.	No. of Vessels Passing Through.	No. of Draw Openings.	No. of Vessels Passing Through.	No. of Draw Openings.	No. of Vessels Passing Through.	No. of Draw Openings.	No. of Vessels Passing Through.
December, 1900	229	447	75	95	52	86	60	101	52	81	51	82	18	29	32	54
January, 1901	220	424	30	39	61	99	28	45	10	15	10	15	4	6	10	15
February, "	142	233	19	25	22	35	18	27	12	17	11	17	2	3	2	3
March, "	253	426	74	101	71	102	68	111	34	55	39	60	5	15	14	21
April, "	217	398	66	91	33	54	52	87	34	50	36	55	14	20	14	20
May, "	430	706	251	330	48	87	216	411	81	132	87	142	34	57	60	99
June, "	407	567	198	238	84	200	186	327	72	105	74	112	24	35	50	76
July, "	317	541	172	224	84	173	150	249	35	53	37	56	30	46	30	47
August, "	401	613	169	209	95	219	138	214	25	41	27	52	21	35	21	35
September, "	3 3	516	145	184	53	82	138	220	36	61	37	66	18	31	18	31
October, "	397	624	135	175	38	63	238	472	59	105	62	110	26	42	47	89
November, "	374	665	82	123	50	85	89	167	62	109	61	126	14	30	43	92
Totals	3,700	6,270	1,416	1,834	691	1,285	1,381	2,431	512	824	532	893	210	349	341	582

REPORT OF THE TRUSTEES OF THE DOWSE INSTITUTE

CAMBRIDGE, December 1, 1901.

To the Honorable, the City Council:—

The Board of Trustees of the Dowse Institute respectfully reports that a course of seven free lectures was given in Union Hall, beginning January 8 and ending February 19, 1901.

An attested copy of the accounts of the Treasurer is herewith submitted, showing the amount of receipts and expenditures.

FRANK A. ALLEN,
W. A. BULLARD,
GEO. HOWLAND COX,
} *Board of Trustees.*

W. A. BULLARD, TREASURER, IN ACCOUNT WITH DOWSE INSTITUTE.

Dr.		*Cr.*	
1901.		1901.	
To Balance	$54 50	By Cambridge Chronicle, advertising	$10 00
City of Cambridge, interest on fund one year	600 00	Cambridge Tribune, advertising	10 00
		J. H. Ford, printing	9 50
		Charles L. Russell, doorkeeper	7 00
		Ushers	10 50
		A. F. Buffum, doorkeeper	7 00
		F. M. Buffum, doorkeeper	7 00
		Rent of hall	210 00
		J. H Thurston, stereopticon	10 00
		Worth G. Ross, lecture	50 00
		Peter MacQueen, lecture	40 00
		John Fiske, lecture	50 00
		A. E Fowler, lecture	30 00
		F. M. Chapman, lecture	60 00
		John C. Bowker, lecture	50 00
		Nat. M. Brigham, lecture	50 00
		Balance	43 50
	$654 50		$654 50

ATTEST: W. A. BULLARD,
Treasurer.

REPORT OF INSPECTOR OF ANIMALS

To the Honorable, the City Council :—

GENTLEMEN :— In compliance with the City Ordinance, I have the honor to present my annual report of Inspector of Animals and Veterinarian for the City of Cambridge, for the year ending November 30, 1901.

The cows of the City have been examined physically for tuberculosis and so far as can be determined by this examination are in a healthy condition, not any being quarantined.

There have been fewer cases of glanders among the horses this year than in previous years.

We have examined large stables, where there had been cases of glanders, several times during the year.

Total number of horses quarantined	30
Killed	28
Released	2

There have been no cases of rabies among dogs reported this year. The horses owned by the City have been in an unusually healthy condition.

For the care of sick and lame horses I have made 637 visits and examined 30 horses for soundness, with the idea of purchasing.

Appropriation		$800 00
Salary	$700 00	
E. H. Patten	9 30	
A. R. Bailey	2 50	
A. Cunningham	11 65	
W. A. Claflin	74 25	
Balance on hand	2 30	
		$800 00

Thanking His Honor, the Mayor, and members of the City Council, I am,

Very respectfully yours,

CHARLES E. HADCOCK, M. D. V.,

Inspector of Animals and Veterinarian.

Nov. 30, 1901.

REPORT OF THE COMMITTEE ON SOLDIERS' AID

The Committee on Soldiers' Aid submits to the City Council its report for the year ending November 30, 1901: —

The amount paid as regular State Aid was	$13,509 00
The amount paid to indigent soldiers and sailors was	1,204 00
The amount paid as soldiers' relief was	7,521 00
The amount paid for the burial of deceased indigent or friendless soldiers or sailors was	560 00
The amount paid to the clerk and agent employed in the examination of settlements, etc., was	1,099 99
Printing and stationery	98 48
Aid by cities and towns	108 25
Ambulance	20 00
Board and care of sundry persons	1,146 87
Car tickets	15 00
Fuel	82 30
Sundry supplies	33 84
Typewriting	12 00
Total	$25,410 73

The amount received from the Commonwealth was	$14,942 61
The amount received from other towns and cities was	371 56
For sundry authorized payments which were not paid	307 00
Total	$15,621 17

There are now upon the State Aid list 263 persons, and upon the list of indigent soldiers and sailors 7. The number of persons upon the soldiers' relief list is 105.

All of which is respectfully submitted,

HANS L. CARSTEIN,
HERMAN BIRD,
JAMES T. BARRETT,
WILLIAM F. BROOKS,
FRED L. BEUNKE,
Committee on Soldiers' Aid.

REPORT OF INSPECTOR OF MILK

Office of Inspector of Milk and Vinegar.
Cambridge, December 2, 1901.

To His Honor, the Mayor, and the City Council of the City of Cambridge :—

Gentlemen : — I have the honor to present the report of the Department of Milk Inspection for the year ending November 30, 1901.

The value of the department of inspection of milk and vinegar is to a large degree dependent upon the number of samples taken and upon the care and accuracy displayed in the analytical work done upon them. Your inspector was fortunate to find a system, when he took charge of this department, that produced a large number of samples yearly from every section of the City, and from almost every milkman. The improvement then, has been largely in the methods of analysis, in the apparatus, and in the keeping of the records. The following methods of analysis are now in use in the department :—

The samples are collected daily from milkmen and stores in two ounce glass bottles, plainly numbered.

The following form is filled out for each sample as it is taken : —

MILK ANALYSIS.	
No.	
Date	190
Fat	
Solids	
Not Fat	
Preservative	
Name	
Address	
Driver	
Can	
Sealed Sample	
No. of Sample Bottle	

MILK ANALYSIS.	
No.	
Date	190
Fat	
Solids	
Not Fat	
Preservative	
Name	
Address	
Sold by	
Milkman	
Amount in Can	
Sealed Sample	
No. of Sample Bottle	

The bottles are found very convenient to work with and the sample though small is sufficient in quantity.

To keep the two classes of samples separated, a white card is used for samples taken from milkmen and a blue card for stores.

As soon as the samples are received in the laboratory, 5c. c. are weighed into a tared dish and evaporated to dryness over the water bath.

The time required for drying is from one and a half to two and a half hours and is dependent on the kind of dish used, the humidity and the barometric pressure.

The only safe gauge for the end of the drying is to weigh the sample at intervals until the weight becomes constant.

By having every dish numbered and a correspondingly numbered counterweight, the weighing of twelve to twenty samples is accomplished in a short time and the chance of error reduced to a minimum, as the weights on the scale pan represent the weight of the milk residue alone.

Various kinds of evaporating dishes have been experimented with, flat bottomed glass, nickel and platinum. All have given reliable results when the proper precautions have been observed. Platinum, however, has given the best results, and its use, when the ash is to be examined, is imperative.

For the fat determination 17.6 c. c. are measured into Babcock milk bottles. The required quantity of commercial sulphuric acid is added and the bottle is whirled in an electric centrifuge for five minutes. Hot water is added and the bottle whirled for another five minutes. The fat is read off in percents directly from the graduation on the stem of the bottle.

In the summer months from May to October every sample was tested for preservatives. Formaldehyd is detected by heating the sample in a porcelain dish with an equal quantity of a mixture of commercial sulphuric acid two parts, water one part, and enough ferric chloride to give the mixture a yellow tinge. A sample free from formaldehyd is turned an orange color, while, if formaldehyd is present, the color is purple. This test has proved sufficiently delicate to detect one part of formaldehyd in 10,000,000 parts of milk.

Borax is detected by moistening tumeric paper with a solution of the ash acidified with hydrochloric acid, and then drying the paper. If borax is present the paper turns red.

At times samples have been tested for special foreign ingredients, for the most part without success. Coloring matter has been found in but one sample. The color used in this case was proved to be annatto by the methods given by Albert E. Leach, Report of the State Board of Health for 1898.

VINEGAR.

Half pint samples of vinegar are taken. The solids are determined as in the case of milk. The acid is titrated with tenth normal caustic soda using phenol phthalein as indicator.

By using a three c. c. pipette the calculation into acetic acid is reduced to multiplying the number of cubic centimeters of the soda solution used, by two. Malic acid is tested for with acetate of lead. The solution to which acetate of lead has been added is filtered and the clear filtrate is polarized directly to determine the presence of sugar other than the laevo rotary fruit sugar. A reading to the right is absolute evidence that the vinegar has been tampered with.

The ash and alkalinity of the ash are determined in twenty c. c. evaporated to dryness on the water bath and burned till white in a gas heated muffle. The filtered aqueous solution of the ash is titrated with tenth normal hydrochloric acid and the results expressed in c. c. of tenth normal acid per 100 c. c. of vinegar taken. The sample is tested qualitatively for sulphates, chlorides, lime and soda, of which it should not contain more than traces.

In certain cases it has been found necessary to make a quantitative determination of the phosphates in the ash, but this has not been done in every sample.

BUTTER.

The water has been determined by the loss at 110°C. in an air oven. The fat has been extracted with benzine, and the curd and the ash determined in the residue. The microscopical examination with polarized light has been depended upon to detect oleomargarine and process butter. These, having crystals of fat in them, give a mottled appearance in the dark field.

RECORDS.

The card catalogue system of keeping records described in the annual report for 1900 has been retained during the present year with very satisfactory results. The system has been extended to include the tests on vinegar, and further improved by entering in red ink all samples which fall below the standard.

The individual sample cards furnish a ready means of sorting the results into groups for the determination of averages, and as these cards are kept on file in consecutive order by numbers it is an easy matter at any time to refer back to the original data upon the sample in question.

RESULTS.

Analytical Work on Milk.

Months, December 1, 1900, to December 1, 1901.	Number of samples.	Per cent. below Standard in Solids or Fat.	Skimmed.	Preserved.	Colored.	Total Solids.			Fat.			Solids not Fat.	Warning sent.
						Highest.	Lowest.	Average.	Highest.	Lowest.	Average.		
December	326	17.0	0	0	0	. ..	10.66	12.26*	.....	1.60	3.28*	8.98*	24
January	330	16.0	0	0	0	.....	11.10	12.33*	.....	2.00	3.31*	9.02*	24
February	382	13.0	0	0	0	.....	11.78	12.41*	.....	2.80	3.37*	9.04*	16
March	396	23.0	0	0	0	.....	11.48	12.33*	.....	2.40	3.38*	8.95*	27
April	380	3.4	1	0	0	.....	10.90	11.77*	.....	0.90	2.75*	9.02*	12
May	406	2.4	0	3	0	.....	11.62	11.71*	.....	2.60	2.98*	8.83*	13
June	280	7.1	0	5	0	.....	9.38	11.45*	.....	2.40	2.89*	8.56*	19
July	308	11.0	2	12	0	15.58	11.68	12.67	6.40	0.10	3.72	8.95	30
August	155	5.0	0	3	0	18.22	11.66	12.83	9.20	2.80	3.74	9.09	8
September	249	8.0	0	0	0	25.08	11.69	12.83	18.80	2.10	3.87	8.96	18
October	152	10.5	0	0	1	15.74	12.41	13.17	6.60	2.50	4.05	9.12	16
November	202	44.0	0	0	0	17.30	12.56	13.11	7.90	2.70	3.95	9.16	26

* Average of samples below the standard in solids or fat.

From December to June, inclusive, only the samples which fell below 3.90 per cent. fat were analyzed for solids, and the averages are made up from the samples which fell below the standard in fat or solids. From July to November, inclusive, owing to the installation of a new water-bath and centrifuge, it was possible to determine the fat and solids in every sample.

The great difference between the per cent. below the standard, in December, January, February, March and November and in the other months of the year, is due not so much to a difference in the quality of the milk, as to the change in the standard required by statute. During the winter months the law calls for 3.70 per cent. fat and 13 per cent. solids, while in summer the figures are 3 per cent. and 12 per cent.

The total averages in the above table show no such variation in quality, and it would create more respect for the law and insure an easier enforcement if the standard were 3.50 per cent. fat and 12.50 per cent solids throughout the year.

MILKMEN.

There have been few changes among the milkmen during the year. Some few have been absorbed by the large contractors, but their places have been taken by new men, so that the total number of men in the business has remained within one of the number on record for 1900.

During the relicensing of dealers in May, the following blank was required to be filled out:—

[SEAL] CITY OF CAMBRIDGE.

OFFICE OF INSPECTOR OF MILK,
CITY HALL.

APPLICATION FOR MILK LICENSE.

Date of Application
Present License No.
Name (if a firm, give firm name and also individual members' names in full).

Address
No. of Teams

	Driver.	Residence.
1		
2		
3		
4		
5		

No. of cans of milk sold per day in Cambridge { Wholesale / Retail

Cream, quarts,
Skim milk, cans,
Source of milk (if from a contractor, give name of contractor; if from farms, give the town or towns where they are located; if from your own farm, give location of dairy and number of cows kept).

Signature of Applicant,

.....

From data thus gathered, the following table was compiled, showing the consumption and source of milk supply of the City: —

The results are given in cans of 8 1-2 quarts capacity and in gallons.

	Cans.	Gallons.
Total milk consumed	4267.5	9074
Milk sold at retail by milkmen	2035	4324
Milk sold from stores	2183.5	4639
Milk raised and used by private individuals	49	111
Skim milk	95.5	202
Cream	463 quarts	116
The milk came to the City in the following ways :		
Brought by railroad	2274	4828
Brought by carts	1780	3770
Raised in the City	224	476

STORES.

The number of stores selling milk has increased from 359 in 1900 to 472 in 1901. Part of this large increase is only apparent and is due to the more efficient control of the stores brought about by the introduction of card catalogues and the listing of certain stores which had been unlicensed or whose licenses had been lost and only found after a careful search of the records.

The ephemeral tenure of the average storekeeper is shown by the large proportion of new licenses (234) to the total number of stores (472).

These figures would indicate that about one-half the stores had changed ownership in the twelve months.

During the months of October and November every store in the City was visited by the Inspector and the following blank was filled out and signed: —

INSPECTOR
[SEAL]
OF MILK

REGISTRATION AS A STORE LICENSED TO SELL MILK.

Name of Owner or Firm
Place of Business No. Street
If a Partnership, Names and Residences of Partners
Name Residence
Name Residence
Kind of Store (Grocery, Provision, etc.)
Post Office
Amount Sold per day
Milkman
Time Received
Sold from (can, cooler or crock)
Kept in (refrigerator, ice tank)
If a refrigerator how drained
Where and how measures are washed
Situation of Urinal or Water Closet
Is any part of Store used for domestic purposes or as a sleeping room
The above is a correct statement.

Signature.....

Witness
Date 190
License Issued
Remarks

These records are kept on file at the office and every new applicant for a license is made to fill out a blank in order to keep the record complete. The information thus obtained has been found very useful in tracing the source of bad samples of milk. From an examination of the data obtained it is found that very few stores keep the milk in a thoroughly scientific manner. By far the majority of the storekeepers are content to sell the milk from the original can, with no precautions to insure a thorough mixture of the contents before serving a customer and with a reckless disregard of the effects of heat on the keeping qualities of the milk.

The most satisfactory method in use is the employment of a cylindrical tin tank large enough to hold one or more cans of milk. The tank is set in a small ice box and surrounded with cracked ice. The milk is dealt out with a long handled dipper or ladle reaching to the bottom of the tank and the ladle is kept in the tank when not in use. The two requisites of thorough mixing and thorough icing are thus secured.

Some of the stores were found very dirty and were not proper places to keep food material of any kind. As the Inspector has no power to re-

voke or refuse to issue a license, mere verbal admonitions have in these cases but little effect and the Inspector has no legal grounds for a complaint if the milk is of standard quality.

The desirability of excluding such stores from the participation in the distribution of milk is manifest. The only practical method to accomplish this result is to raise the fee for a milk license. Twenty-five dollars would deter this class of storekeepers from keeping milk and would also exclude another large class which keeps milk for advertising purposes.

WARNINGS.

A system of warnings has been instituted to let dealers know when their samples of milk or vinegar are approaching too low a limit. These warnings are sent on the following blank and when the fault has seemed to be in careless handling, producing a partial skimming, a card stating the fact has been enclosed: —

[SEAL] CITY OF CAMBRIDGE.

OFFICE OF INSPECTOR OF MILK.

CITY HALL, 190

Dear Sir:—A sample of milk taken from you was not up to the standard required by law.

The sale of such milk or possession with intent to sell renders you liable to a fine of $50 to $100.

Analysis:

Fat,
Solids,

Respectfully yours,

PHILIP P. SHARPLES,
Inspector of Milk.

OFFICE HOURS
Monday, Wednesday, Friday,
9 to 11.

Two hundred and thirty-three of these warnings were sent on milk samples and thirty-eight on vinegar samples. In almost every case a subsequent sample taken within a few days has shown a decided improvement.

COURT CASES.

Two cases were carried to court. In both instances formaldehyd was found to be present, and in one case the milk was also below the standard. The dealers were fined $20 and $50 respectively.

The following statistics are compiled from the records of the office for the year December 1, 1900, to December 1, 1901: —

Licenses granted to milkmen	155
Licenses granted to stores	234
Stores on record December 1, 1901	472
Samples of milk analyzed	3,697
Milk samples below standard	481
Per cent. of samples below standard	13
Warnings sent on milk	233
Vinegar samples analyzed	209
Samples below standard	83
Warnings sent on vinegar	38
Butter samples analyzed	8
Complaints made in court	2
Convictions	2
Fines	$70

EXPENDITURES.

Appropriation		$1,700 00
Salary of Inspector	$900 00	
Salary of J. F. Wheeler	420 00	
Printing	67 66	
Apparatus	174 55	
Chemicals	16 80	
Car Tickets	45 00	
Stationery	21 62	
Samples and incidentals	19 92	
Express	2 70	
Horse and buggy	2 00	
	$1670 25	
Balance of appropriation	29 75	
		$1,700 00

Respectfully submitted,

PHILIP P. SHARPLES,
Inspector of Milk.

REPORT OF THE SEALER OF WEIGHTS AND MEASURES

OFFICE OF THE SEALER OF WEIGHTS AND MEASURES,
CAMBRIDGE, December 2, 1901.

To the Honorable, the City Council: —

I have the honor of submitting a report of the Department of Weights and Measures for the year ending November 30, 1901: —

Amount appropriated		$1,963 73
AMOUNT REVENUE.		
Fees for sealing and weighing	$776 02	
Refunded amount on Cambridge Chronicle bill by Albert F. Roberts	26 50	
Total receipts for year		$802 52
EXPENDITURES.		
Salary of Sealers:—		
A. F. Roberts	$416 65	
A. S. K. Clark	564 49	
		981 14
Wages of assistant:—		
John C. Connors		423 75
Horse, etc :—		
Boarding	$166 80	
Shoeing	14 65	
Repairs, harness, etc.	24 34	
		205 79
Repairs on City Scales:—		
J. Begman & Co	$ 40	
George W. Gale Lumber Company	1 28	
Otis Wood Works	60 02	
E. D. Sawyer & Co.	18 20	
		79 90
Office equipment:—		
Brock Bros , rule, etc	$ 85	
Billings & Stover, graduate	25	
Cambridge Gas Light Company. tube	30	
George E French, letter file	50	
Henry Troemner, scale	59 35	
Fairbanks & Co., weight	2 25	
Herman Strater & Co., standard measures	17 90	
Brock & Eaton	45	
John Foster, badge	1 00	
Library Bureau	46 00	
		128 85
Amount carried forward		$1,819 43

Amount brought forward			$1,819 43
Incidentals:—			
Boston Elevated Railway Company:—			
A. F. Roberts	$10 00		
A. S. K. Clark	5 00		
		$15 00	
James Ryan, stamps		5 25	
F. A White, hardware		70	
Cambridge Chronicle, advertising		8 31	
The Mitchell Manufacturing Company		1 45	
Billings & Stover, acid		05	
P. H. Moriarty, brush		40	
S. E Roberts, acid		1 25	
Charles H. Thurston, books, etc.		2 32	
E. D. Sawyer & Co.		7 14	
Hatch & Co., express		15	
Worcester Bros		15 46	
Chadwick Lead Works		1 50	
Caustic & Clafflin		17 50	
Fairbanks & Co.		5 25	
Garfield & Sawyer, acid		3 50	
Adams Express Company		75	
W. J. Cunningham, Supt., postage		1 00	
City Messenger's Department		7 88	
Brock & Eaton		4 71	
S J. Parkhill & Co.		2 50	
Dr. F. A. Dunbar		7 50	
J. S. Trowbridge & Co.		1 00	
Boston & Albany Railroad Company		2 00	
Sawin's Express Company		80	
O. S. Bullock		50	
George G. Wright		78	
American Express Company		1 15	
L. C. Chase & Co.		2 00	
			117 80
Refunded amount:—			
Bill of Cambridge Chronicle			26 50
Total expense			$1,963 73

TABLE SHOWING THE WORK PERFORMED BY THE DEPARTMENT FROM APRIL 23, 1901.

	Sealed.	Adjusted.	Condemned.	Total Inspected.	Per cent. Sealed.	Per cent. Adjusted.	Per cent. Condemned.	Number found Correct.	Number Incorrect.	Per cent. Correct.	Per cent. Incorrect.
Scales	1,422	639	94	1,516	93.8	42.1	6.2	783	733	51.6	48.4
Weights	4,755	3,712	.....	4,755	100.	78.1	...	1,043	3,712	21.9	78.1
Dry Measures	1,583	17	17	1,600	98.9	1.1	1.1	1,566	34	97.9	2.1
Liquid Measures	20,538	49	1,923	22,461	91.4	.2	8.6	20,489	1,972	91.2	8.8
Yard Sticks	133	.....	1	134	99.2	....	.8	133	1	99.2	.8
Coal and Charcoal Baskets	41	.....	3	44	93.2	....	6.8	41	3	93.2	6.8
	28,472	4,417	2,038	30,510	93.3	14.4	6.7	24,055	6,455	78.8	21.2

Whole number of articles inspected, 30,510.
" number of articles adjusted, 4,417.
" number of articles condemned, 2,038.

INVENTORY OF PROPERTY — DEPARTMENT OF WEIGHTS AND MEASURES.

December 2, 1901.

1 Roll top desk, oak	
1 Black walnut roll top desk, used by Superintendent of Janitors	
1 Black walnut desk	
5 Chairs	
1 Black walnut table	
1 Clothes press	
1 Wooden cabinet	
3 Benches	
1 Case of drawers	
1 Sink	
5 Mats	
Miscellaneous books	
1 Card record in oak case	
1 Card index in oak case	
1 Hektograph	
1 Letter press	
1 Blotter bath	
	$100 00
1 Bay horse	$100 00
1 Express wagon	100 00
1 Light wagon	50 00
1 Heavy harness and 1 light harness	25 00
1 Plush robe	1 00
1 Halter	50
1 Stable blanket	1 00
1 Rain blanket	2 00
1 Woolen blanket	2 00
1 Hitch weight	75
1 Standard balance	150 00
1 Oak cabinet for same	50 00
2 Prescription scales in cases	50 00
1 Troemner balance	60 00
2 Sealers' trip scales	5 00
1 Platform scale with brass weights	75 00
1 Set Avoirdupois iron weights, one 50 lb., one 25 lb., one 20 lb., one 10 lb., one 5 lb ,	25 00
3 Sets Standard weights, brass, ⅛ oz. to 4 lbs.	20 00
Amount carried forward	$717 25
Amount brought forward	717 25
2 Sets Standard dry measures	65 00
2 Sets Standard liquid measures	45 00
1 Set Standard liquid measures, incomplete	3 00
1 1-oz glass graduate	20
1 Set Troy weights	3 00
1 Set Metric weights, 1 gr. to 1 kilo.	3 00
1 Kilo. weight	1 50
5 Boxes of miscellaneous druggists' weights, not standardized	10 00
40 50-lb. weights	100 00
1 Set iron weights, 25 lbs., 10 lbs., 5 lbs.	5 00
1 Brass yard stick	2 00
1 Metric bar in case	10 00
1 Upright drill	5 00
1 Hand drill	2 00
	$1,071 95

Miscellaneous Tools.

1 Iron crow bar	3 Tool boxes
1 Iron vise	1 Gas furnace
5 Can irons	1 Set soldering irons
1 Lathe	2 Bushels corn for measuring
5 Saws	1 T square
Files	1 Case opener
Planes	1 Tool chest with miscellaneous tools
Hammers	1 Iron ash barrel
Monkey wrench	$20 00
Hack saw	
Screw driver	
Pliers	
1 Box flax seed	Total $1,091 95
1 Charcoal measure	

The work of this department was placed under my charge in May, 1901, and as I have been unable to find, among the books and papers left by my predecessor, any record of work performed from November 30, 1900, to April 23, 1901, and as no fees had been paid in to the City Treasurer up to that date, this report will cover in these details from the date of my appointment.

There had been expended to May 1, 1901, $509.70, with unpaid bills amounting to $69.42.

It had been decided previous to my appointment to remove the office of the Department to the City building, Brattle square, and in the basement of this building the Sealer has, in some respects, better quarters than were furnished the department at the City Hall.

The month of May was spent in moving and refitting the office and in adjusting the standards.

Mr. D. V. S. Palmer, Deputy Sealer of the Commonwealth of Massachusetts, was called upon to inspect the equipment of the department, and all standard weights and measures were passed upon and adjusted by him previous to their use in this year's work.

He recommended that the balance as now used in this office, and which has been in use since 1845, be replaced by one of more modern and accurate construction, also that the try scale used by my predecessor be abandoned.

The equipment of the office is not complete, as several standards are lacking.

Twice during the past six months we have been placed in the position of being unable to seal on account of the lack of proper standards.

A card system of records has been installed and by it will be kept a complete account of the scales, weights and measures inspected in each place visited, the date of inspection and amount in fees collected.

These cards are arranged in order of street number; streets alphabetically.

Each card is designed to show the result of inspection of the place it represents for the next eight years.

On May 29th the first outside work was done and from that date the sealer and his assistant have worked early and late with the object in view of covering the whole City by the end of November, but in this they were disappointed.

They found that to do *careful* inspecting and *accurate* adjusting a much longer time than six months was necessary.

The portion of the City east of Inman Square and Hampshire Street, through East Cambridge, with the exception of manufacturing establishments and the larger platform scales, was not reached.

Much of the office work has been done evenings, as the only days allotted to inside work were Saturday forenoons and when rainy days made outside work impossible.

The revenue of the department for the year amounts to nearly $800.00, and if the whole City could have been covered, probably $1000.00 and possibly more would have been to the department's credit.

This revenue may vary from year to year as the adjustings vary. In all probability we shall find less adjusting to be done another year.

The average yearly fees for the past seven years have been less than $500.00.

Owing to the large amount of work that has to be done free of charge it cannot be expected that the department will ever be self-sustaining.

All sealing of cans and jars used in the distribution of milk is done in accordance with the law, without expense to the milk dealer. Also, all other sealing and adjusting done at the office brings no revenue to the City.

This part of the work must necessarily increase, and with it the expense of the department.

PUBLIC SCALES.

The two public scales, one located in Lechmere Square, East Cambridge, and the other in Union Square, North Cambridge, were found in poor condition.

The frame of the one at East Cambridge had to be renewed, having become so rotted that a heavy team pulled the iron hanger through. This scale has been repaired.

The one at North Cambridge is now out of commission as the road bed has crowded in upon the scale so much as to make adjusting impossible. Also, the iron work must be thoroughly overhauled before the scale will be in condition to use.

As there is a petition in the hands of the Park Commission to make this Square more attractive, and as such changes as will be necessary might alter the location of the scale, it was deemed advisable to await a decision in the matter before expending any amount on the scale in its present location.

It is a mistake to locate scales where there is so much travel over them as is the case in both of these scales.

The weighers in charge of these scales complain that the revenue from weighing hardly pays them for their trouble, claiming that a large amount of the weighing that should be done on a public scale is done by parties having platform scales, who weigh for less than the City Ordinance will allow weighing to be done on the City Scales.

STOREKEEPERS.

In the performance of my duties I have found most storekeepers ready and seemingly glad to have their scales, measures, etc., inspected, and if the work is done thoroughly and with the care that such work should command, I feel that the Sealer's visit will not be looked upon as a necessary evil, as is perhaps the case in some instances now.

In a number of instances I found dealers selling beans and cranberries by the liquid measure instead of dry measure, the excuse for so doing being ignorance.

All such dealers have been warned and will be watched in the future.

If consumers would provide themselves with accurate measures and examine the amount of goods sent them, carelessness on the part of the storekeeper would be held in check.

All inhabitants have a right to call upon this department to seal any measures they may use.

Two convictions have been secured in Court; one of an Italian fruit dealer for altering a sealed measure by putting in a false bottom, fined $20.00; the other a provision dealer for using a condemned liquid measure in selling cranberries, fined $5.00.

PRODUCE PEDDLERS.

Peddlers of produce, etc., I found equipped with measures which, aside from the expected wear, were generally in good condition.

Of course some measures were found that had to be condemned, having become splintered off in use. These the dealers readily destroyed upon request of the Sealer.

The ordinance requiring a permit to sell on the streets of the City has not been in force long enough to judge of its benefits.

JUNK DEALERS.

These dealers, as a rule, seem to be living up to the requirements of their licenses, and their scales, with few exceptions, have been found to be as accurate as can be expected of spring scales.

In a few cases, the dealer has been warned to watch his scale and see that the pointer did not become bent out of position.

MILK DEALERS.

These dealers have not, as a rule, responded to the requests of the Sealer to bring their measures to be sealed, as is required by Massachusetts laws.

Owing to the uncertain state of affairs which governed the work of the department at the commencement of the year, and also from lack of time to follow them up, I have thus far refrained from making complaints against them in Court, and had these dealers responded to my repeated requests, much of the time spent on outside work must of necessity have been used in testing their jars and cans.

This part of the work will now be taken up and will be given much attention.

In previous years' reports, the duties of the Sealer have been fully explained. To these duties the Massachusetts Legislature seems to be adding something each year.

The 1901 Legislature passed an act governing the sale of coal, etc., by which Sealers are empowered to request teams delivering coal to reweigh on any scales the Sealer designates.

This act also requires all dealers to issue tickets with each load, which ticket must show the weight of coal and also be signed by a sworn weigher.

Purchasers should insist upon having such tickets properly filled out, and although only 100 lbs. be delivered, a ticket filled out as the said act prescribes must be furnished the purchaser at the time of delivering the goods.

Nothing less than 100 lbs. of coal or coke can be sold by weight. Smaller quantities of coal must be delivered in sealed baskets, coke being put up in half-bushel bags.

This coal law greatly increases the Sealer's duties, and he is handicapped in the performance of the work on account of there being but two public scales in the City, outside of the scales used by the Street Department. One of these scales is out of commission.

Much time has been given to office work in previous years that cannot be given in the future unless the demand for it is greater than it has been in the past. The Sealers of past years have been in the habit of advertising that the office would be open from January 1st to May 1st, during certain hours of each day, for the inhabitants to bring in their scales, measures, etc., for sealing and adjusting, such work being done without charge.

I understand that not many have availed themselves of this privilege, and yet much valuable time has been lost in observing office hours which might have been used in other work.

It is the purpose of the Sealer to perform the duties of the position energetically, and every detail of the work will receive thorough attention as far as time will allow.

He will expect like work of all assistants, but as the work increases,

and there is no doubt but what it will, it will be necessary to employ more assistance than has been employed in the past.

The Sealer has already recommended that a Deputy Sealer be appointed for these reasons: At the present time the assistant has no authority to act if occasion should arise and the Sealer be not with him, also if the work is to be divided up, in order to attend to all the duties properly, more than one person authorized as Sealer must be in the employ of the department.

At the present time one person is employed as an assistant all of the time, and if he should be appointed a Deputy Sealer the expense to the City would be very little more, if any, and the City would receive a larger return for the amount spent.

I appreciate the kind assistance I have received from a number of City Officials, aiding me very much in my work.

Captain Folsom and the officers performing House Duty at Station No. 1 have taken much trouble to deliver goods to parties during my absence from the office on outside work.

With my assistant, Mr. John C. Connors, I share whatever credit may be due for the work performed by this department during the past seven months.

To His Honor, the Mayor, I desire to express my appreciation of the interest taken in the department's work.

Respectfully submitted,

A. SHERBURNE K. CLARK,
Sealer of Weights and Measures.

REPORT OF THE BOARD OF SURVEY

BOARD OF SURVEY, December 15, 1901.

To the Honorable City Council: —

In compliance with the provisions of a City Ordinance, approved January 5, 1901, the Board of Survey of the City of Cambridge, presents herewith its first annual report.

This Board was created by Chapter 405 of the Legislative Acts of the Commonwealth for the year 1900, which is as follows :—

[CHAP. 405.]

AN ACT TO ESTABLISH A BOARD OF SURVEY FOR THE CITY OF CAMBRIDGE.

Be it enacted, etc., as follows:

SECTION 1. The mayor of the city of Cambridge shall appoint, in January in the year nineteen hundred and one, subject to confirmation by the board of alderman of said city, three persons, citizens of said city, to constitute a board of survey for said city, to serve, one for the term of one year, one for the term of two years and one for the term of three years from the first day of January in said year and until their respective successors are appointed and confirmed; and thereafter the mayor of said city shall appoint annually, in the month of January, subject to confirmation by the board of aldermen of said city, one citizen of said city, to serve as a member of said board for the term of three years from the first day of January in that year or until his successor is appointed and confirmed. Any vacancy occurring in said board shall be filled by an appointment as aforesaid for the remainder of the unexpired term. The salaries of the members of said board shall be fixed by ordinance.

SECT. 2. Any person or corporation contemplating laying out or locating and constructing any street or way in said city after the passage of this act shall before beginning such construction submit to said board of survey suitable plans, to be prepared in accordance with such rules and regulations as said board may prescribe. Upon the receipt of such plans, together with a petition for their approval, said board shall give a public hearing thereon, after advertising such hearing once a week for two successive weeks in a newspaper published in said city, the last advertisement to be at least two days before the hearing; and after such hearing said board may alter such plans and determine where such street or way shall be located, and the widths and grades thereof, and shall so designate on said plans. Said plans shall then be approved, signed by said board, marked as made under the provisions of this act, and filed in the office of the city engineer of said city, who shall attest thereon the date of filing.

SECT. 3. The board of survey shall from time to time cause to be made under its direction plans of such territory or sections of land

in said city as said board may deem necessary, showing thereon the location of such streets or ways, whether already laid out or not, as said board shall be of opinion the present or future interests of the public will require in such territory, showing clearly the directions, widths and grades of each street or way, and may employ such assistants and incur such expenses as it may deem necessary therefor, not exceeding the amount of money appropriated by the city for the purpose. Before making any such plan the board shall give a public hearing as to the locations, directions, widths and grades of streets or ways in the territory to be shown on the plan, after advertising such hearing once a week for two successive weeks in a newspaper published in said city, the last advertisement to be at least two days before such hearing, and shall, after making any such plan, give a like notice of hearing, and a hearing thereon, and keep the plan open to public inspection for one month after the first advertisement of such hearing. After such hearing and after the alterations deemed necessary by said board have been made in such plan the plan shall be approved, signed, marked, filed and attested as provided in case of plans mentioned in section two of this act.

SECT. 4. The powers of the city council of said city and of either branch thereof in regard to highways shall not be abridged by this act in any manner, except as provided in this section. After the passage of this act no street or way in the city of Cambridge shown on any plan filed as aforesaid shall be laid out, located anew, altered, widened or changed in grade, and no such street or way, whether already or hereafter laid out, shall be constructed by any public authority, except in accordance with the provisions of this act. If any person or corporation shall hereafter open for public travel any private way, the location, direction, widths and grades of which have not previously been approved in writing by said board of survey in the manner provided in this act, then neither the city nor any other public authority shall place any public sewer, drain, water pipe or lamp in, or do any public work of any kind on, any private way opened to public travel contrary to the provisions of this act: *provided, however*, that this provision shall nor prevent the laying of a trunk sewer, water or gas main, if it be required by engineering necessities.

SECT. 5. If any building shall hereafter be placed or erected in said city upon land within the boundaries of any street or way shown on any of the plans filed as aforesaid, or on land adjacent to any such street or way the grade of which at the time of placing or erecting such building is other than the grade shown on said plans, or on land adjacent to any street or way the plan and profile of which has not been approved by said board of survey, no damages caused to any building so placed or erected by the construction of such street or way, as shown on said plans, or caused to any building so placed or erected, or to the land upon which said building is placed or erected, by the subsequent change of grade of any street or way, the plan of which has not been approved by said board of survey, shall be recovered by or paid to the owner of the whole or any part of the estate of which the land upon which said building so placed or erected formed a part at the date of the first advertisement of hearing as aforesaid.

SECT. 6. Said city may from time to time appropriate sums of money to be expended by said board of survey for carrying out the provisions of this act. No expenditures shall be made in excess of such appropriations.

SECTION 7. This act shall take effect upon its passage. [*Approved June* 27, 1900.

By authority of the above act, the City Council adopted the following Ordinance, which was approved January 5, 1901:—

[SEAL]

CITY OF CAMBRIDGE.

In the Year One Thousand, Nine Hundred.

AN ORDINANCE

in relation to the survey department of the City of Cambridge.

Be it Ordained by the City Council of the City of Cambridge as follows:

SECTION 1. The survey department shall be under the charge of the board of survey, created under the provisions of chapter four hundred and five of the legislative acts of the year nineteen hundred. No person shall be a member of said board who is at the same time a member of the city council. The members of the board shall receive no compensation for their services.

SECT 2. The board may choose a clerk and may make such rules and regulations for its own government, and in relation to all its officers and employees, as may be deemed expedient.

SECT. 3. The board, so constituted and organized, shall have and exercise all the powers given to it and to the city council by the legislature, by the four hundred and fifth chapter of the acts of the year nineteen hundred, and by any acts in addition thereto which may be hereafter enacted, so far as the same can be legally delegated by the city, subject to all the duties, liabilities and restrictions in said last-named chapter contained.

SECT. 4. The board, on or before the fifteenth day of December in each year, shall present to the city council a report containing a statement of all its acts, doings and proceedings, together with any information or suggestions which it may deem important, and an estimate of the amount required of the city for the conduct of the department for the year ensuing.

SECT 5. No member of the board, and no person appointed to any office or employed by virtue of this chapter or of the acts of the legislature mentioned in the third section of this chapter shall be interested, directly or indirectly, in any contract, bargain, sale or agreement, in relation to lands, or any matter or thing connected therewith, wherein the city is interested; and any and all contracts, bargains, sales or agreements, made in violation of this section shall be void as to the city.

SECT. 6. The board may require the city engineer, either by himself or by his assistants, to perform all work which properly comes within the province and under the direction of a civil engineer, including the making of examinations and surveys, and the preparation of statements, plans, profiles, estimates and descriptions.

In conformity with the provisions of Section 1 of the above act, the following persons were appointed and confirmed as members of the Board, viz.: —

James A. Wood, for the term of three years.

Edwin D. Mellen, for the term of two years.

William E. Doyle, for the term of one year.

The several appointments to date from the first day of January, 1901.

The Board was organized by the choice of James A. Wood as Chairman.

The first matter brought before the Board was the petition of George G. Crocker and others praying that certain "locations, directions, widths

and grades shown on an accompanying plan may be respectively approved." These locations, etc., referred to the laying out of proposed streets extending over the filled land between Main Street and the Esplanade. It was desired that the streets should be laid out at the width of thirty feet. A preliminary hearing was given to the petitioners at the close of which it was determined by the Board to require that the proposed streets should be fifty feet in width. The City Engineer was requested to prepare a plan showing the laying out of streets in the entire territory bounded northerly by Main Street, southeasterly by the Esplanade, northwesterly by the Boston & Albany Railroad and westerly by Massachusetts Avenue. Upon the matter of these locations, as shown upon the City Engineer's plan, all parties interested were given a full hearing before the Board, according to law.

Subsequently, after a thorough consideration of the subject, the Board approved the locations, etc., shown upon the before-mentioned plan, the same being dated May 23, 1901, numbered 1, and on file in his office. The matter of the plotting out of streets upon the large territory before described, with a view to a right development of the property, has thus been determined by the Board, and it is believed that its decision is generally satisfactory.

Owing to a question which had arisen in regard to the validity of the acts of the City Council, relative to the acceptance and laying out of certain streets, after the approval of the act creating a Board of Survey in this City, on June 27, 1900, hearings were given before the Board upon the question as to the approval of the locations of the streets hereinafter named, all of which were laid out subsequent to the above date.

The several locations, directions, etc., were duly approved by this Board on May 9th, and notice thereof sent to the City Council, viz.: —

STREETS LAID OUT AND ACCEPTED OR WIDENED SINCE JUNE 27, 1900.

NAME.	FROM	TO	DATE OF ACCEPTANCE.	DATE OF PLAN.
Amherst Street	Massachusetts Avenue	Robinson Street	Nov. 15, 1900	Oct. 29, 1900
Berkshire Street	York Street	Bristol Street	Sept. 28, 1900	June 1, 1900
Binney Street	First Street	Third Street	Sept. 28, 1900	May 31, 1900
Commercial Avenue	First Street	Binney Street	Sept. 28, 1900	May 31, 1899
Garden Street, widening	Waterhouse Street	Northerly, about 187 feet	Nov. 16, 1900	Sept. 25, 1900
Granite Street	Pearl Street	Brookline Street	Sept. 28, 1900	Sept. 19, 1899
Hamlin Street	York Street	Plymouth Street	Sept. 28, 1900	June 1, 1900
Hardwick Street	Berkshire Street	Portland Street	Sept. 28, 1900	May 16, 1900
Lincoln Street	Webster Avenue	Willow Street	Sept. 28, 1900	May 16, 1900
Mt. Auburn Street	Near Fitchburg Railroad Bridge	Widened both sides	Sept. 28, 1900	Apr., 1900
Pleasant Street	Present Southerly end	Charles River Road	July 12, 1900	Feb. 10, 1900
Sidney Street	Pacific Street	Chestnut Street	June 28, 1900	Apr. 17, 1900
Traymore Street	Eustis Street	Harris Street	July 12, 1900	June 26, 1900
West Street	Inman Street	Lee Street	Nov. 16, 1900	June 26, 1897
Belmont Street, widening	Mt. Auburn Street	Belmont Line	Dec., 1900	June, 1898
Clark Street, widening	School Street	Washington Street	Dec., 1900	Oct. 15, 1900
Garden Street, widening	Waterhouse Street	Northerly	Dec., 1900	Sept 25, 1900
Harris Street	Oxford Street	Somerville Line	Dec., 1900	July 30, 1900
Ash Street	Mt. Auburn Street	Southerly	Dec., 1900	Oct. 13, 1886
Sargent Street	Rindge Avenue	Railroad Street	Dec., 1900	Nov. 22, 1900
Dudley Street	Cedar Street	Montgomery Street	Dec., 1900	Nov. 22, 1900
Vine Street	First Street	Second Street	Dec., 1900	Nov. 19, 1900
Charles Street	First Street	Second Street	Dec., 1900	Nov. 19, 1900
Spring Street	First Street	Second Street	Dec., 1900	Nov. 5, 1900

Hearings were also given pursuant to the statute in reference to the locations, etc., of the following streets, the several plans of which were duly approved by this Board, viz. : —

Streets.	Date of Plan.
Bridge Street, widening	March 2, 1901
Commercial Avenue, widening on westerly side	March 5, 1894
Concord Avenue, widening	March 15, 1901
Cottage Park Avenue, acceptance	March 21, 1901
Gorham Street, acceptance	March 15, 1901
Holden Street, acceptance	March 5, 1901
Magoun Street, acceptance	March 5, 1901
Wright Street, acceptance	Nov. 1, 1901

The locations, etc., of various private ways, as shown upon sewer plans in the City Engineer's office, were also approved for sewer purposes as follows : —

Private Ways.	Plan Number.
Groveland Street	3936
Cottage Park Avenue	5026
Charles Street	3915
Clifton Street	271
Winter Street Place	3800
Harris Court	3784
Jordan Place	2629
Eustis Court	3784
Whittemore Avenue	5024
Locust Court, Cushing Avenue, Bird Street	5109
Norman Street	3940
Bolton Street	2885
Bancroft Street	3714

Private passage way leading from the Esplanade to Amherst Street. Sewer plan, dated March 24, 1896.

Pioneer and Deacon Streets. Sewer plan, dated April 2, 1901

Although none of the streets and ways named in the foregoing list were in a condition for acceptance at this time, yet it was deemed necessary for the public convenience and the public health that sewers should be laid in all of them. As the language of the second sentence in Section 4, of the act creating the Board of Survey, seemed to prohibit the laying of a sewer in any street, the location of which was not approved by this Board, it, therefore, gave its approval, for sewer purposes only, to the locations of all the streets named.

The matter of the laying out of Smart Street, so-called, a proposed street of the width of thirty feet, extending between Massachusetts Avenue and State Street, was heard by the Board; and, after due consideration, the location, etc., of the street, was disapproved.

Up to the date of the preparation of this report, the following matters were remaining in the files of the Board, awaiting action:—

PROPOSED STREETS.

Athenæum, between First and Second Streets.

Second, between Binney and Athenæum Streets.

Munroe, between First and Third Streets.

These streets are shown on a blue print plan, dated May 31, 1900, and action was deferred until the parties interested should file suitable plans for acceptance.

Jackson Street, between Rindge Avenue and Harvey Street.

Pacific Street, between Brookline and Sidney Streets.

Sketches for plans were shown of these, the same being dated November 22, 1900. Plans for acceptance are now in course of preparation by the City Engineer.

Greenhalge Street, from the Esplanade through Amherst Street.

Robinson Street, from the Esplanade across Amherst Street.

The last two streets were indicated on a general plan of the laying out of the Charles River Embankment territory. Action upon these streets was also delayed until suitable plans shall be filed.

Blanche Street. Plan dated June 19, 1901.

Museum Street. Plan dated June 28, 1901.

Upon Blanche Street the Board has given a hearing, and has deferred action in order to visit the street, it being a long street and but thirty feet in width.

Museum Street has not been considered.

STREET WIDENINGS AND EXTENSIONS.

First Street, — widening and changes of lines of approach to Main Street.

Commercial Avenue,—proposed change in line of widening to easterly side of street, new lines shown on original plan dated March 5, 1894.

Winthrop Street, — widening and laying out. Plan dated October, 1881.

Laurel Street, — widening and laying out. Plan dated May 9, 1901.

Warland Street. — extension and laying out from Pleasant Street to Western Avenue. Plan dated October 5, 1901.

In addition to the foregoing, the Board has also considered the proposition of Linn B. Porter, relative to the laying out of a boulevard through Cambridge from the Back Bay Park District to Middlesex Fells.

Mr. Porter appeared before the Board and explained at length his proposed plan, and other citizens were also given an opportunity to be heard.

It was adjudged that the project was too important in its nature, and involved an expenditure of money too large, for hasty action, and it was decided to return the petition to the City Council for its further consideration.

The foregoing pages are intended to give as briefly as possible a presentation of the action of the Board upon the numerous matters that were placed in its charge from time to time during the year.

Before entering upon its duties, it was deemed advisable to obtain the opinion of the City Solicitor as to the proper "interpretation of the Statute which brought it into existence, and defines its duties and powers." The substance of the City Solicitor's reply to the questions submitted, is as follows :—

"In conclusion it seems to me that the Board of Survey is, under the act in question, a supervisory board to see to it that as far as it lies within their power and authority under the act, streets and ways shall be laid out, changed, altered, and constructed upon some plan or idea, both as to the present and future conditions of the growth and circumstances of the City, which, if possible, shall be upon broad lines and beyond that which may be in the minds of the City Council, adopting and carrying out a particular line of change, development or improvement; and that there shall be adopted and executed as far as possible some general, comprehensive and lasting scheme of lay-out and development of the streets in this City, not only meeting the requirements of the present, but of the future. It is assumed, no doubt, that a permanent Board would be more apt to accomplish this purpose than a Board or Council which is ever changing, and for this reason also, this act may have been passed,—to see if after a trial the results would ensue as desired."

Conscious of the responsibility with which it was charged under this interpretation of the Statute,—with no personal or private interests to serve,—this Board has sought in all its decisions, to carry out the purpose above stated.

If its work thus far completed shall result in the promotion of a more "general and comprehensive scheme in the lay-out of streets in this City," then it will feel amply compensated for its labors in that direction.

JAMES A. WOOD,
EDWIN D. MELLEN,
WILLIAM E. DOYLE,
} *Board of Survey.*

REPORT OF THE SCHOOL COMMITTEE FOR 1901.

In compliance with Section 45 of the Rules of the School Board, the Superintendent herewith submits his twenty-seventh annual report, it being for the year ending December 31, 1901 : —

Population of Cambridge.

1875	47,838	1895	81,643
1885	59,658	1900	91,886
1901 (estimated)	92,716		

School Census.

Number of children in the city five years old or more, but less than fifteen.

1885 (taken in May)	10,957	1895 (taken in May)	12,869
1890 (taken in May)	11,971	1901 (taken in September)	15,300

Schools and Class Rooms.

Latin School	1	Class rooms in use	14
English High School	1	" " " "	11
Manual Training School	1	" " " "	4
Grammar Schools	7	" " " "	95
Primary Schools	19	" " " "	96
Grammar and Primary Schools	9	" " " "	92
Kindergartens	14	" " " "	14
Evening Drawing Schools	2	" " " "	5
Evening High School	1	" " " "	9
Evening Elementary Schools	4	" " " "	18
Whole number of Day Schools			52
Number of class rooms for Day Schools			326

High Schoolhouses.

Schoolhouses	Number of Class rooms	Erection of Building	Size of Lot, Square Feet	Valuation of Land	Valuation of Building	Valuation of Furniture
Latin	15	1897	79,759	$43,800	$225,000	$27,150
English High	11	1891	74,366	40,900	220,000	9,220
Manual Training	4	1887	81,128	44,000	56,000	8,000
Total	30		235,253	$128,700	$501,000	$44,370

Grammar Schoolhouses.

Schoolhouses	Number of Classrooms	Erection of Building	Size of Lot, Square Feet	Valuation of Land	Valuation of Building	Valuation of Furniture
Agassiz	7	1875	19,689	$8,000	$20,000	$1,215
Allston¶	12†	1857‡	15,193	4,600	30,000	1,795
Ellis	12†	1898	25,700	6,000	48,000	2,993
Harvard	16†	1871§	20,494	12,000	65,000	3,769
Morse	14†	1890	25,650	7,000	73,000	2,040
Peabody	14†	1888‡	21,813	9,800	68,000	3,340
Putnam	13†	1847§	14,400	9,800	64,500	2,550
Roberts	12†	1898	16,400	12,000	48,000	3,003
Russell	10†	1896	33,073	6,000	40,000	2,440
Shepard	11	1856‡	14,755	11,000	26,000	1,047
Sleeper	8	1894	21,284	5,000	24,000	1,190
Taylor	10†	1895	23,592	6,000	36,000	1,720
Thorndike	12	1860‡	10,027	4,000	30,000	1,676
Washington	12	1851‡	14,951	10,000	25,000	1,830
Webster	16†	1852‡	25 839	9,000	50,000	3,550
Wellington*	13†	1884‡	27,673	8,300	52,000	2,635
Total	192		330,533	$128,500	$699,500	$36,793

* This includes another schoolhouse on the same lot containing four rooms used for primary classes.
† Also an assembly hall.
‡ Has been remodelled. § Has been rebuilt. ¶ Burned, December 12, 1901.

Primary Schoolhouses.

Schoolhouses	Number of Classrooms	Erection of Building	Size of Lot, Square Feet	Valuation of Land	Valuation of Building	Valuation of Furniture
Boardman	8	1868	10,018	$4,000	$13,000	$1,290
Corlett*	2	1880†	10,000	1,200	3,000	195
Cushing	2	1880†	14,787	1,500	3,000	136
Dunster	4	1857‡§	10,000	3,000	3,000	261
Felton	4	1848§	15,090	4,500	6,000	200
Gannett	5	1886	15,434	3,000	12,000	430
Gore	12	1871§	9,900	4,000	50,000	825
Holmes	4	1870	11,182	5,000	5,500	275
Lassell	4	1880	10,000	3,000	8,000	272
Lowell	4	1883	12,033	3,600	5,500	402
Merrill	8	1864	37,828	19,000	45,000	1,425
Otis	8	1859§	8,270	4,000	20,000	930
Parker	6	1893	12,319	7,000	15,000	710
Reed	4	1868	12 000	1,200	4,000	310
Riverside	4	1868	11,198	3,000	5,000	330
Sargent	4	1838§	9,995	5,000	3,000	255
Stearns	4	1843	10,050	5,000	3,000	322
Tarbell	4	1882	19,500	4,900	7,000	355
Willard	12	1870	20,079	7,000	25,000	1,350
Wyman	6	1871§	14 347	4,500	5,000	555
Primary, Total	109		274,030	93,400	241,000	10,828
Grammar, "	192		330,533	128,500	699,500	36,793
High, "	30		235,253	128,700	501,000	44,370
Total	331		839,816	$350,600	$1,441,500	$91,991

* Used for a kindergarten.
† Purchased.
‡ Moved to its present site.
§ Has been remodelled.

Number of Teachers in the Day Schools.

[Special teachers are included in the total.]

December	Latin School	English High School	Manual Training School	Grammar Schools	Primary Schools	Kinder-gartens	Total
1897	16	23	Became a pub. school Jan. 1, 1899	157	127	22	354
1898	16	23		161	133	22	364
1899	19	23	14	170	138	24	396
1900	22	24	14	173	142	26	409
1901	22	24	14	177	143	25	413

Attendance at All the Day Schools.

Year	Number of Pupils Registered	Average Number Belonging	Average Daily Attendance	Per cent of Attendance
1897	14,373	12,317	11,397	92.5
1898	15,026	12,907	11,978	92.8
1899	15,753	13,255	12,285	92.6
1900	16,203	13,816	12,684	91.8
1901	16,065	14,144	13,021	92.1

Attendance at the Latin School.

Year	Number of Pupils Registered	Average Number Belonging	Average Daily Attendance	Per cent of Attendance
1897	387	358	339	94.5
1898	398	362	343	94.7
1899	398	371	351	94.8
1900	430	404	385	95.2
1901	490	468	449	96.1

Attendance at the English High School.

Year	Number of Pupils Registered	Average Number Belonging	Average Daily Attendance	Per cent of Attendance
1897	714	644	622	96.7
1898	773	685	662	96.7
1899	794	688	666	96.7
1900	572	514	491	95.6
1901	613	517	490	94.8

Attendance at the Manual Training School.

Year	Number of Pupils Registered	Average Number Belonging	Average Daily Attendance	Per cent of Attendance
1900	212	192	183	95.5
1901	217	191	184	96.2

Attendance at the Grammar Schools.

Year	Number of Pupils Registered	Average Number Belonging	Average Daily Attendance	Per cent of Attendance
1897	6,318	5,682	5,351	94.2
1898	6,570	5,883	5,548	94.3
1899	7,008	6,107	5,738	93.9
1900	7,192	6,295	5,891	93.6
1901	7,044	6,483	6,079	93.8

Attendance at the Primary Schools.

Year	Number of Pupils Registered	Average Number Belonging	Average Daily Attendance	Per cent of Attendance
1897	6,308	5,192	4,741	91.3
1898	6,505	5,429	4,984	91.8
1899	6,750	5,514	5,071	91.9
1900	6 888	5,788	5,267	91.0
1901	6,815	5,840	5,310	90.9

Attendance at the Kindergartens.

Year	Number of Pupils Registered	Average Number Belonging	Average Daily Attendance	Per cent of Attendance
1897	646	441	344	78.1
1898	780	548	441	80.4
1899	803	575	459	79.9
1900	909	623	467	74.9
1901	886	645	509	78.9

Number of Pupils Admitted to the Lowest Grade of the Latin School.

Course, 5 years.

Year	Boys	Average Age	Girls	Average Age
1897	61	14 years 7 months	52	14 years 7 months
1898	49	14 years 8 months	56	14 years 3 months
1899	58	14 years 5 months	51	14 years 4 months
1900	84	14 years 5 months	70	14 years 5 months
1901	57	14 years 6 months	58	14 years 2 months

Number of Pupils Graduated from the Latin School.

Course, 5 years.

Year	Boys	Average Age	Girls	Average Age.
1897	21	19 years 1 month	14	18 years 6 months
1898	16	18 years 1 month	27	18 years 3 months
1899	16	18 years 3 months	27	18 years 5 months
1900	20	18 years 11 months	19	18 years 11 months
1901	22	18 years 7 months	34	19 years 0 months

Number of Pupils Admitted to the Lowest Grade of the English High School.

Year	Boys	Average Age	Girls	Average Age
1897	57	14 years 9 months	150	15 years 0 months
1898	60	14 years 8 months	169	15 years 1 month
1899	61	15 years 0 months	152	15 years 0 months
1900	56	15 years 5 months	170	15 years 1 month
1901	46	14 years 11 months	145	15 years 0 months

Number of Pupils Graduated from the English High School.

Year	Boys	Average Age	Girls	Average Age
1897	14	18 years 1 month	56	18 years 9 months
1898	19	18 years 9 months	64	18 years 5 months
1899	14	18 years 4 months	45	18 years 6 months
1900	23	18 years 2 months	45	18 years 8 months
1901	13	18 years 3 months	47	18 years 9 months

Number of Pupils Admitted to the Lowest Grade of the Manual Training School, with the Number of Graduates.

Year	Admitted	Average Age	Graduated	Average Age
1897	84	15 years 4 months	20	18 years 6 months
1898	70	15 years 5 months	14	18 years 2 months
1899	92	15 years 3 months	13	18 years 6 months
1900	74	15 years 0 months	16	19 years 0 months
1901	110	15 years 2 months	21	18 years 3 months

Number of Pupils Graduated from the Grammar and Primary Schools.

Year	Grammar Schools. Course, 6 yrs.	Average Age	Primary Sch. ols Course, 3 yrs.	Average Age
1897	521	14 years 11 months	1,292	9 years 9 months
1898	518	15 years 0 months	1,395	9 years 8 months
1899	553	15 years 0 months	1,393	9 years 8 months
1900	582	14 years 11 months	1,423	9 years 7 months
1901	565	14 years 11 months	1,467	9 years 7 months

Length of Time in Completing the Course of Study in the Grammar Schools.

Year	In 4 years	In 5 years	In 6 years	In 7 years or more
1897	6 per cent	30 per cent	51 per cent	13 per cent
1898	6 per cent	29 per cent	47 per cent	18 per cent
1899	6 per cent	31 per cent	47 per cent	16 per cent
1900	6 per cent	28 per cent	50 per cent	16 per cent
1901	6 per cent	28 per cent	50 per cent	16 per cent

Length of Time in Completing the Course of Study in the Primary Schools.

Year	In 2 years	In 2¼ years	In 3 years	In 3½ years	In 4 years	In 4½ years or more
1897	2 per cent	3 per cent	63 per cent	4 per cent	21 per cent	7 per cent
1898	4 per cent	2 per cent	59 per cent	6 per cent	20 per cent	9 per cent
1899	3 per cent	4 per cent	58 per cent	7 per cent	20 per cent	8 per cent
1900	2 per cent	2 per cent	59 per cent	6 per cent	22 per cent	9 per cent
1901	3 per cent	1 per cent	61 per cent	5 per cent	20 per cent	10 per cent

Number of Pupils in the Latin School, December, 1901.

Grade	Boys	Girls	Total	Per cent
Fourteenth	26	44	70	.149
Thirteenth	28	40	68	.144
Twelfth	39	40	79	.167
Eleventh	71	57	128	.270
Tenth	61	67	128	.270
Total	225	248	473	

NUMBER OF PUPILS IN THE ENGLISH HIGH SCHOOL, DECEMBER, 1901.

Grade	Boys	Girls	Total	Per cent
Thirteenth	28	66	94	.177
Twelfth	26	70	96	.180
Eleventh	25	108	133	.250
Tenth	59	150	209	.393
Total	138	394	532	

NUMBER OF PUPILS IN THE MANUAL TRAINING SCHOOL, DECEMBER, 1901.

Grade	Boys	Girls	Total	Per cent
Thirteenth	29	This school is for boys only. It became a part of the public school system, January 1, 1899.		.122
Twelfth	53			.223
Eleventh	55			.233
Tenth	100			.422
Total	237			

NUMBER OF PUPILS IN THE GRAMMAR SCHOOLS, DECEMBER, 1901.

Grade	Boys	Girls	Total	Per cent
Ninth	264	323	587	.086
D	42	48	90	.013
Eighth	362	409	771	.112
C	56	83	139	.020
Seventh	504	523	1,027	.150
Sixth	505	577	1,082	.158
B	104	150	254	.037
Fifth	601	612	1,213	.177
A	121	188	309	.045
Fourth	723	659	1,382	.202
Total	3,282	3,572	6,854	

NUMBER OF PUPILS IN THE PRIMARY SCHOOLS, DECEMBER, 1901.

Grade	Boys	Girls	Total	Per Cent
Third	774	811	1,585	.277
Second	919	871	1,790	.315
First	1,208	1,109	2,317	.408
Total	2,901	2,791	5,692	

Number of Pupils and Teachers in the Kindergartens.

Year	Boys	Girls	Total	Number of Teachers
1899	331	337	668	24
1900	337	356	693	26
1901	355	351	706	25

Number of Pupils Belonging to the Evening Drawing Schools, with the Average Attendance.

1896	1897	1898	1899	1900	1901
193	209	182	194	184	193
103	114	99	99	99	97

Number of Pupils Belonging to the Evening Schools, with the Average Attendance.

1896	1897	1898	1899	1900	1901
1,128	1,225	1,165	1,158	1,248	1,286
445	448	494	452	420	464

Number of Pupils in the Private Schools in Cambridge, Including Those in the Parochial Schools.

1896	1897	1898	1899	1900	1901
2,518	2,512	2,637	2,713	3,004	3,439

Number of Age and Schooling Certificates Issued.

1896	1897	1898	1899	1900	1901
289	229	291	324	380	387

Cost of Instruction in the Day Schools

[Salaries of teachers, superintendent, supervisor, agent, clerks, and truant officers.]

Year	Number of Teachers in December	Average Number of Pupils	Whole Cost	Cost per Pupil
1876	176	7,066	$164,818 00	$23 32
1878	173	7,028	136,491 20	19 42
1880	182	7,175	130,371 75	18 17
1882	200	7,898	137,328 55	17 38
1884	216	8,414	152,290 62	18 09
1886	233	9,218	165,277 42	17 92
1888	241	9,756	175,773 80	18 02
1890	263	10,089	190,558 21	18 89
1892	284	10,861	207,144 22	19 07
1894	312	11,166	228,873 48	20 50
1896	337	11,957	245,104 01	20 50
1898	364	12,907	268 182 97	20 78
1899	396	13,255	305,744 87	23 06
1900	409	13,816	326,512 34	23 63
1901	413	14,144	336,149 80	23 77

Cost of the Day Schools.

[This includes the cost of instruction, of text-books and supplies, of incidental expenses, of the care of truants, and the care and repair of schoolhouses.]

Year	Number of Teachers in December.	Average Number of Pupils	Whole Cost	Cost per Pupil
1876	176	7,066	$200,894 09	$28 43
1878	173	7,028	162,437 77	23 11
1880	182	7,175	153,967 56	21 45
1882	200	7,898	166,230 52	21 04
1884	216	8,414	203,234 56	24 15
1886	233	9,218	207,536 46	22 51
1888	241	9,756	225,408 57	23 10
1890	263	10,089	241,980 84	23 98
1892	284	10,861	266,651 02	24 55
1894	312	11,166	287,137 37	25 72
1896	337	11,957	316,090 83	26 44
1898	364	12,907	345,566 30	26 77
1899	396	13,255	389,915 63	29 41
1900	409	13,816	417,554 00	30 22
1901	413	14,144	429,208 22	30 35

Cost of Instruction in the Evening Schools.

Year	Elementary	High	Drawing	Total
1896	$2,104 00	$1,321 50	$1,110 00	$4,535 50
1897	2,086 00	1,274 50	1,060 00	4,420 50
1898	2,324 00	1,439 00	1,091 00	4,854 00
1899	2,570 00	1,499 00	1,206 00	5,275 00
1900	3,375 00	1,874 00	1,430 00	6,679 00
1901	2,777 50	1,551 75	1,205 00	5,534 25

Finances.

(For the financial year ending December 1, 1901.)

Cost of instruction in day schools	$336,149 80
Cost of instruction in evening schools	5,534 25
Cost of care and repair, day schools	68,740 07
Cost of care and repair, evening schools	2,618 68
Cost of text-books and supplies, day schools	20,440 96
Cost of text-books and supplies, evening schools	345 79
Expended for incidentals	1,935 70
Expended for care of truants	1,818 69
Expended for flags	123 00
Expended for vacation schools	1,885 48
Expended for new schoolhouse, Ward I.	59,003 64
Expended for land for new schoolhouse, Ward II.	9,500 00
Expended for sundries for new schoolhouse, Ward II.	76 20
Balance expended on Felton, Gore, and Wellington schoolhouses	5,383 55
Expended on Gannett schoolhouse, sanitary arrangements	2,536 57
Expended on Lassell schoolhouse, sanitary arrangements	3,684 66
Expended on Riverside schoolhouse, sanitary arrangements	3,453 70
Expended on Tarbell schoolhouse, sanitary arrangements	3,853 80
Expended for repairs on Allston schoolhouse, fire of April 17	1,308 03
Expended for permanent improvements on different buildings	3,461 74
Expended for new boilers, heating plant and subways for Rindge manual training school and the new schoolhouse, Ward I.	10,062 80
	$541,917 11
Deducting from the above the amount received from the Hopkins Fund, $637.61, the tuition of State Wards, $524.00, and the tuition of non-resident pupils, $6,041.50, less a rebate of $5.00	7,198 11
The actual cost of the schools to the city is	$534,719 00
Assessed value of real and personal estates, May, 1901	$96,216,875 00
Ratio of expenditure for school purposes to the valuation of 1901	.0056

Statistics Taken from the Fifty-fifth Annual Report of the Secretary of the State Board of Education.

Number of towns and cities: towns, 320; cities, 33	353
Number of public schools based on the single class room as the unit of comparison	10,699
Number of pupils between seven and fourteen years of age attending the public schools during the year 1900-1901	292,028
Number of different pupils between five and fifteen years of age attending the public schools during the year 1900-1901	413,692
Number of pupils under five years of age attending the public schools during the year 1900-1901	11,579
Number of pupils over fifteen years of age attending the public schools during the year 1900-1901	42,917

Number of pupils of all ages in the public schools during the year 1900-1901	468,188
Average membership of pupils in all the public schools during the year 1900-1901	406,080
Average attendance in all the public schools during the year 1900-1901	371,048
Percentage of attendance based on the average membership	91
Number of persons employed as teachers in the public schools during the year: men, 1,214 ; women, 12,408	13,622
Number of teachers who have graduated from normal schools	5,136
Average number of months the public schools have been kept for the entire year	9 mos., 5 days
Number of high schools	261
Number of teachers in high schools	1,546
Number of pupils in high schools	39,524
Total expenditure for the support of the public schools	$11,134,933 91
Total expenditure for new schoolhouses, permanent improvements, and ordinary repairs	3,045,013 09
Entire expenditure	$14,179,947 00

TABULAR VIEW.

DECEMBER 31, 1901.

Prepared by the Secretary of the School Committee.

Names of Schools	Teachers	Salaries	No. of Pupils Dec. 31, 1901
Latin	William F. Bradbury	$3,000	473
	Theodore P. Adams	2,000	
	John I. Phinney	2,000	
	Max Benshimol	1,400	
	Helen M. Albee	950	
	Constance Alexander	950	
	Mabel V. Arnold	600	
	Mary A. Bachelder	950	
	Alice C. Baldwin	950	
	Isabel S. Burton	900	
	Alice D. Chamberlain	600	
	Etta L. Davis	700	
	Caroline Drew	950	
	Mary C. Hardy	950	
	Rose Hardwick	950	
	Mabel E. Harris	900	
	Helen W. Munroe	900	
	Louisa P Parker	950	
	Lena G. Perrigo	900	
	Lucile C. Reynolds	700	
	Ethel V. Sampson	700	
	Jennie S. Spring	950	
	Annie S. Dodge*	600	
English High	Ray Greene Huling	3,000	532
	Edwin L. Sargent	2,000	
	Francis L Bain	800	
	Joseph A. Coolidge	1,600	
	Russell T. Greene, Jr.	1,500	
	Grace L. Deering	1,200	
	Caroline Close	950	
	Bertha L Cogswell	950	
	Gertrude H Crook	950	
	Mary L. Cunningham	600	
	Esther S. Dodge	900	
	Agnes B Goerwitz	800	
	Bessie W. Howard	600	
	Katherine H. James	600	
	Jeannie B. Kenrick	700	
	Maud A. Lawson	950	
	Henrietta E McIntire †	950	
	Mary Moulton	950	
	Lillian C. Rogers	950	
	Caroline A. Sawyer	950	
	Emma A. Scudder	950	
	Florence W. Smith	950	
	Martha R Smith	950	
	Delia M. Stickney	1,200	
	Annie F. Stratton	700	

* Secretary and Librarian.
† On leave of absence for study or travel in accordance with the rules of the School Committee.

Tabular View — Continued.

Names of Schools	Teachers	Salaries	No. of Pupils Dec. 31, 1901
English High	Mabel D. Watson	$600	
	Martha L. Babbitt *	600	
Manual Training	Charles H. Morse	3,000	237
	Myra I. Ellis	1,300	
	Albert P. Briggs	300	
	Charles J. Foskett	1,080	
	Lewis D. Hill	1,200	
	John M. Hussey	1,000	
	James E. MacWhinnie	1,000	
	Joseph M. Norton	1,000	
	Frederick B. Scotton†	1,000	
	Walter M. Smith	1,000	
	James G. Telfer	1,500	
	Frederick W. Turner	1,500	
	William H. Varnum	800	
	Albert L. Ware	1,200	
	John W. Wood, Jr	1,200	
	John J. McKenzie*	500	
Agassiz Grammar	Maria L. Baldwin	1,000	141
Agassiz Primary	Edith C. Arey	600	139
	Addie B. Byam	700	
	Mary G Carpenter	700	
	Lillian G. Goodwin	600	
	Mary A. Parsons	700	
	Grace C. Stedman	700	
	Jennie L. Upham	700	
Allston Grammar	Everett L Getchell	1,700	372
Allston Primary	Ella S Danforth	800	124
	Mary A. Driscoll	450	
	Maude M. Dutton	550	
	Lucy M. Fletcher	700	
	Nellie M. Foley	550	
	Jennie C Hardy	550	
	Ellen A. Kidder	700	
	Ella M. Leaver	700	
	Catherine A. McLean	650	
	Ethel I. Murch	550	
	Esther D. Paul	650	
	Carrie L. Power	550	
	Mary E. Regan	550	
	Evelyn M. Whitman	700	
Boardman, Primary	Elizabeth J. Karcher	790	339
	Mabel E. Blake	700	
	Margaret S. Bradbury	450	
	Christina R. Denyven	700	
	Malvina M. Joslin	700	
	Maud E Kimball	700	
	C Florence Smith	700	
	Sarah E. Stewart	700	
Cushing, Primary	Maude A Deehan	760	82
	Margaret E. Sheehan	450	
Dunster, Primary	Susan E. Wyeth	765	71
	Mary Ellen Colby	700	
	Mary A. Doran	700	
Ellis, Grammar	Edward O. Grover	2,000	501

* Secretary and Librarian.

† On leave of absence for the school year.

Tabular View — Continued.

Names of Schools	Teachers	Salaries	No. of Pupils Dec. 31, 1901
Ellis, Grammar	Nellie A Hutchins	$900	
	Caroline L. Blake	800	
	Helen W. Metcalf	750	
	Emma A. Faulkner	700	
	Harriet Foster	700	
	Lottie L Griswold	700	
	Louise H. Griswold	700	
	Ella M. Horne	700	
	Ellen J. Hunt	700	
	Flora C. Ingraham	700	
	Sarah W. Mendell	600	
	Mabelle E. Porter	700	
	Mary A. Stephenson	700	
Felton, Primary	Florence A. Rogers	770	170
	Marcia R Bowman	700	
	S. Emma Davis	700	
	Carrie H. Smith	700	
Gannett, Primary	Mary A Rady	775	178
	Annie M. Billings	700	
	Katherine A. Gaskill	500	
	Augusta G. Mirick	700	
	Margaret F. Sanderson	500	
Gore, Primary	Frances E. Pendexter	810	472
	Katherine L. Dolan	600	
	Mary L. Dolan	600	
	Minnie A. Doran	700	
	Kate A. Hegarty	700	
	Mary A Hurley	650	
	Katherine L. McElroy	700	
	Julia G. McHugh	700	
	Mary E. Mulloney	700	
	Anastasia Peters	700	
	Nora E. Reardon	500	
	Jane E. Whoriskey	700	
Harvard, Grammar	Thomas W. Davis	2,000	902
	Arthur B. Webber	1,300	
	Ada H. Wellington	900	
	Margaret B. Wellington	800	
	Anna M. Brown*	750	
	Addie L. Bartlett	700	
	Winifred V. Cobb	650	
	Nellie A. Coburn	700	
	Frances Fabyan	700	
	Margaret M. Fearns	650	
	Estella J. French	700	
	Annie B. Lowell	700	
	Adeline M. Murphy	700	
	Laura L. Parmenter	700	
	Louise C. Patterson	700	
	Annie L. Prince	500	
	Harriette F. Sawin	700	
	Elizabeth L. Setchell	700	
	Annie M. Street	700	
	Emma F. West	700	
	Hattie B. Woodward	700	
	Hortense O. Young	700	

*On leave of absence for the school year.

Tabular View — Continued.

Names of Schools	Teachers	Salaries	No. of Pupils Dec. 31, 1901
Holmes, Primary	Lucy C. Wyeth	$760	77
	Eva G. Oakes	650	
Lassell, Primary	Frances E Whoriskey	770	186
	Rose V Collier	700	
	Elizabeth B Gahm	700	
	Mary E Whoriskey	700	
Lowell, Primary	Eusebia A. Minard	765	72
	Agnes J McElroy	700	
Merrill, Primary	Georgia E. Martin	785	229
	Julia M Davis	500	
	Louise W Harris	700	
	Daisy E Haynes	500	
	Marion B Magwire	700	
	Nellie S. Walker	600	
Morse, Grammar	Mary A. Townsend	2,000	483
Morse, Primary	Mary E Towle	900	192
	Marcia E. Ridlon	750	
	Elizabeth J. Baldwin	700	
	Ida M Holden	500	
	Ida J Holmes	700	
	Florence E. Hunter	600	
	Grace H. Manter	700	
	Alice E. May	700	
	Helen Montague	500	
	Anna A. O'Connell	550	
	Ella M Pinkham*	700	
	Elizabeth H. Richards	700	
	Emilie F. Richardson	700	
	Mary E. Sawyer	700	
	Lucy M. Soulée	700	
	Grace A Stone	550	
	Mary E Warren	650	
Otis, Primary	Ellen N. Leighton	785	293
	Frances Allen	700	
	Josephine M. Doherty	700	
	Luella M. Marsh	700	
	Emma J. Ross	700	
	Anna M Sullivan	450	
	Margaret Sullivan	700	
	Ellen C. Walsh	700	
Parker, Primary	Mary A Knowles	780	255
	Charlotte E. Clapp	700	
	Butella E L. Conland	700	
	Mattie S Cutting	650	
	Harriet R Harrington	700	
	Agnes Marchant	700	
Peabody, Grammar	Frederick S. Cutter	2,000	355
Peabody, Primary	Charlotte A. Ewell	900	127
	Susan C. Allison	700	
	Anna F. Bellows	700	
	Mary H Ellis	700	
	Helen E. Hazard	700	
	M. Lizzie Hewitt	700	
	Katherine L Carr	550	
	Martha A. Parker	500	

* On leave of absence for the school year.

Tabular View — Continued.

Names of Schools	Teachers	Salaries	No. of Pupils Dec. 31, 1901
Peabody { Grammar	Effie A. Perkins*	$650	
Peabody { Primary	Maude R. Pullen	650	
	Dora Trefethen	550	
	Alice M. Tufts	700	
Putnam, Grammar	Frederick B. Thompson	1,700	624
	Eliza M. Hussey	900	
	Grace Clark	700	
	Mary A. Carmichael	700	
	Anna L. P. Collins	700	
	Mabel Garey	700	
	Sarah M. Grieves	700	
	Hattie L. Jewell	700	
	Annie B. Josselyn	700	
	Marcia L. Marple	650	
	Margaret F. O'Keefe	500	
	Eliza S. Paddack	700	
	Katherine E. Smyth	450	
	Annie A. Trelegan	700	
	Minnie F. Wilson	500	
Reed, Primary	Margaret T. Burke	770	141
	Elizabeth G. Nelligan	550	
	Julia A. Robinson	700	
	Clara W. Ruggli	500	
Riverside, Primary	Elizabeth A Tower	770	154
	Amanda M. Alger	700	
	Mary A. Burke	700	
	Hattie A. Thayer	550	
Roberts, Grammar	W. Mortimer MacVicar	1,850	523
	Sara A. Bailey	900	
	Emily R. Pitkin	750	
	Susan M. Adams	700	
	Mary Blair	700	
	Mary M Brigham	700	
	Elizabeth M Breslin	450	
	S. Alice Fell	700	
	Susan L. Keniston	700	
	Evelyn B. Kenney	700	
	Ada M. Litchfield	700	
	Nina M. Marsh	700	
	Ida G Smith	700	
	Caroline M. Williams	700	
Russell { Grammar	Arthur C Wadsworth	2,000	{ 306
Russell { Primary	Alice G. Teele	900	{ 115
	Henriette E. de Rochemont	750	
	Carrie J. Allison	700	
	Fannie P. Browning	700	
	Ella E. Buttrick	700	
	Mary A. Connelly	650	
	Edna W. Hodgkins	700	
	H. Maud McLean	700	
	M. Ursula Magrath	500	
	Gertrude E. Russell	650	
	Loretta L Shaw	700	
Sargent, Primary	Mary A. Brown	770	179
	Christina D. Barbey	700	

*On leave of absence for the school year.

Tabular View — Continued.

Names of Schools	Teachers	Salaries	No. of Pupils Dec. 31, 1901
Sargent, Primary	Elmira F. Hall	$700	
	Marion Prescott	600	
Shepard, Grammar	Evelyn J. Locke	900	166
Shepard, Primary	Mary E. Bassett	700	120
	Corabelle H. Bates	500	
	Mary F. Calnane	700	
	Florence M. Dudley	700	
	Alice M. Gage	700	
	Mary M. Gilman	700	
	Theresa H Mahoney	600	
Sleeper, Grammar	A. Estelle Ingraham	900	136
Sleeper, Primary	Emily Bissell	700	174
	Evelyn M. Dormer	700	
	Fannie G. Flanders	700	
	Elizabeth O. Haynes	500	
	Melissa M. Lloyd	700	
	Margaret E. Quinn	450	
	Blanche C. Trefethen	700	
Stearns, Primary	Fannie E Higgins	770	190
	Maria J. Bacon	700	
	Ellen A. Cheney	700	
	Eva A. Taylor	700	
Tarbell, Primary	Emma J. Young	770	191
	Florence J. Alley	700	
	Carrie P. Pierce	700	
	Anna H. Welsh	450	
Taylor, Grammar	Ella R. Avery	900	135
Taylor, Primary	Mary A. Boland	650	245
	Bridget T. Boyle	700	
	Anna E. Callahan	700	
	Lillian M. Canty	700	
	Josephine Day	650	
	Cecilia F. Leahy	700	
	Maud J Paget	550	
	Agnes M. Sheridan	700	
	Mabelle S. Welsh	500	
Thorndike, Grammar	Ruel H. Fletcher	2,000	568
	Harriet A. Townsend	900	
	Laura A Westcott	750	
	Annie G. Casey	450	
	Grace W. Fletcher	700	
	Lena S Frederikson	700	
	Mary A. Grant	600	
	Harriet M. Hanson	700	
	Emma A. Hopkins	700	
	Lillian H. Kenney	450	
	Mary E Nason	700	
	Ellen M. Plympton	700	
	Susan L. Senter	700	
	Lydia A. Whitcher	700	
Washington, Grammar	John W. Freese	2,000	407
	Blanche E Townsend	900	
	Alice P Fay	750	
	Eldora J. Clark	700	
	Mary L. Ells	700	

Tabular View — Continued.

Names of Schools	Teachers	Salaries	No. of Pupils Dec. 31, 1901
Washington, Grammar....	Winifred L. Kinsley.....	$700	
	Margaret M. MacVicar.....	450	
	Emma Penney.....	700	
	Margaret J. Penney.....	700	
	Bessie H. Pike.....	700	
	Hattie Shepherd.....	700	
	Mary E. Stiles.....	700	
	Marianne M. Webb.....	700	
Webster, Grammar.....	John D. Billings.....	2,000	736
	William D. Tillson.....	1,300	
	Alice C. Phinney.....	900	
	Martha N Hanson.....	800	
	Ada A. Billings.....	750	
	Mabel T Ashley.....	700	
	Lilian C. Burbank.....	500	
	Charlotte M. Chase.....	700	
	Fanny F. Curtis.....	700	
	Susan I Downs.....	700	
	Josephine Hills.....	700	
	Gertrude I. Hulbert.....	700	
	Gertrude I. Johnson.....	650	
	Minnie V. Reid.....	700	
	Harriette E. Shepard.....	700	
	Olive L. Slater.....	700	
	Ellen F. Watson.....	700	
	Katherine L. Wight.....	550	
Wellington { Grammar...	Herbert H Bates.....	2,500	{ 499
Wellington { Primary....	Sarah J Gunnison.....	1,000	{ 392
	Margaret Kidd.....	1,000	
	Mary I. Vinton.....	1,000	
	Carrie H. Stevens.....	900	
	Emma M. Taylor.....	700	
	Training Class.....	7,783	
Willard, Primary.....	Sarah L. Baker.....	810	542
	Agalena Aldrich.....	450	
	Sally N. Chamberlain:.....	700	
	Elizabeth M. Crowley.....	450	
	M Elizabeth Evans.....	700	
	Ella F Gulliver.....	700	
	Julia S. Gushee.....	700	
	Mary E. G Harrington.....	700	
	Katherine M. Lowell.....	700	
	Belle Menard.....	700	
	Mary A O'Hara.....	550	
	Eliza D. Watson.....	700	
	Grace R. Woodward.....	700	
Wyman, Primary.....	M Carrie Dickman.....	780	243
	Addie M. Bettinson*.....	700	
	Mary H. Brooks.....	650	
	Georgianna P. Dutcher.....	700	
	Genevieve S. Flint.....	700	
	Eva J. Irish.....	700	
	Agnes Ross Smith.....	500	
Kindergarten { Boardman.....	Mary B. Pratt.....	700	57
	Hattie P. Russell.....	500	

*On leave of absence for travel or study in accordance with the rules of the School Committee.

Tabular View — Concluded.

Names of Schools		Teachers	Salaries	No. of Pupils Dec. 31, 1901
Kindergartens	Corlett	Sarah S. Wells	$700	39
		Annie M. Dodd	600	
	Dunster	Clara A. Hall	700	26
	Gannett	Carrie E. Shepherd	700	50
		Marion L. Akerman	500	
	Gore	Selma E. Berthold	700	60
		Jennie S. Clough	600	
	Lowell	Melinda Gates	700	32
	Merrill	Caroline A. Leighton	650	63
		Gretchen K. Weinschenk	500	
	Peabody	Julia L. Frame	650	22
	Riverside	Edith L. Lesley	700	50
		Olive M. Lesley	600	
	Shaw	Harriette E. Ryan	700	54
		Leonice S. Morse	550	
	Sleeper	Mabel S. Adams	700	62
		Caroline E. Simpson	500	
	Taylor	Mary F. Leland	700	71
		Bertha V. Jameson	500	
	Wellington	Gertrude M. Gove	700	59
		Florence Rice	550	
	Willard	Ellen A. Watson	700	61
		Alice V. McIntire	650	

Teachers of Sewing — Agnes Gordon	$700
Alice H Nay	600
Nancy T. Dawe	600
Director of Music — Frederick Elmer Chapman	2,000
Director of Drawing — Peter Roos	1,900
Assistant in Drawing — Lucia N. Jennison	800
Director of Nature Study — Sarah E. Brassill	1,000
Director of Physical Training — Sara Eleanor Boudren	900
Superintendent — Francis Cogswell	3,500
Supervisor of Primary Schools — Mary A. Lewis	1,200
Agent — Sanford B. Hubbard	2,100
Clerks — Althea B. Frost	750
Myrta E. Smith	600
Porter — John Lemon	600
Truant Officers — Lucian S. Cabot	1,000
John Carmichael	1,000
William H. Porter	1,000
Thomas F. Riley	800

Summary.

Number of pupils in Latin School	473
Number of pupils in English High School	532
Number of pupils in Manual Training School	237
Number of pupils in Grammar Schools	6,854
Number of pupils in Primary Schools	5,692
Number of pupils in Kindergartens	706
Total	14,494
Number of pupils belonging to the public schools, December 31, 1900	14,432

Increase of pupils, 1901	62
Increase of pupils, 1900	332
Increase of pupils, 1899	314
Increase of pupils, 1898	476
Increase of pupils, 1897	422
Increase of pupils, 1896	714
Increase of pupils, 1895	250
Increase of pupils, 1894	278
Increase of pupils, 1893	135
Increase of pupils, 1892	210
Increase of pupils, 1891	222
Average annual increase of pupils from 1891 to 1901 (inclusive)	335

Cost of Instruction.

Schools and Officers	Cost of Instruction	Average Number of Pupils	*Cost per Pupil
Latin School	$23,710 34	468	$50 66
English High School	26,265 58	517	50 80
Manual Training School	17,988 33	191	94 18
Training School (Teachers)	14,742 20	786	18 76
Grammar Schools (except Training School)	127,882 80	6,045	21 16
Primary Schools (except Training School)	87,492 21	5,492	15 93
Kindergartens	15,827 34	645	24 54
Teachers of Sewing	1,788 00	....	....
Director of Music	2,000 00	....	....
Directors of Drawing	2,630 00	....	....
Director of Nature Study	1,000 00	....	....
Director of Physical Training	900 00	....	....
Substitute Teachers	1,308 00	....	....
Superintendent	3,500 00	....	....
Supervisor of Primary Schools	1,200 00	....	....
Agent	2,100 00	....	....
Clerks	1,350 00	....	....
Truant Officers	3,860 00	....	....
Porter	600 00	....	....
Rebate on Tuition	5 00	....	....
Total	$336,149 80	14,144	$23 77

Cost of instruction in Evening High School	$1,551 75
Cost of instruction in Evening Elementary Schools	2,777 50
Cost of instruction in Evening Drawing Schools	†1,205 00
	$5,534 25

* It has been the practice in past years to use the number belonging to the schools in December in getting these averages This year the average number belonging during the school year has been used This changes the averages but seems the proper basis on which to compute them.

† The Director of Drawing is principal of these schools. No part of his salary has been included in this amount.

REMARKS ON THE STATISTICS.

The number of pupils registered during the year ending June, 1901, is 16,065; the average number belonging, 14,144; the average daily attendance, 13,021. In the per cent of attendance there has been an increase of three-tenths of one per cent over last year. The number belonging to the schools in December, 1900, was 14,432; in December, 1901, 14,494; an increase of 62. The opening of a parochial school will account for this small increase. The entire cost of the day schools, which includes the cost of instruction, of text-books and supplies, of incidental expenses, of the care of truants, and the care and repair of schoolhouses, exceeds that of last year by $11,654.22, and the cost per pupil by $0.13. In the cost of instruction the increase is $9,637.46, an increase in the cost per pupil of $0.14. The following taken from the sixty-fourth annual report of the Board of Education is of special interest in this connection:—

"The Legislature of 1900 so extended the statutory definition of support, that now for the first time it includes expenditures of every kind for the public schools except those for public school buildings, such expenditures being for the following designated purposes:—

1. Teachers' wages.
2. Conveyance of pupils.
3. Fuel and the care of school premises.
4. School committees, clerks, truant officers, etc.
5. Superintendent of schools.
6. Text-books and supplies.
7. School sundries.

Previous to 1900, items 5, 6 and 7 were not included in the statutory definition of support. Item 2 was not included previous to 1896. The earlier definition was framed in simpler times, when children were not conveyed to school, when superintendents were unknown, when pupils bought their own text-books, and sundries, if there were any, made an inconspicuous showing in the school bills. An appropriation of money for the support of public schools covers all the purposes mentioned in the statutory definition of the word.

Expenditures for public school buildings, for whatever purpose, are separated by statute from expenditures for support.

Building expenditures are for the following purposes: —

1. New schoolhouses.
2. Alterations and permanent improvements.
3. Ordinary repairs.

Money for new schoolhouses, including the land, is usually raised on bonds or notes, though sometimes by immediate taxation; for alterations and permanent improvements, sometimes by loan, and sometimes by immediate taxation; for ordinary repairs, usually by immediate taxation, but sometimes, especially if the repairs are extensive, by loan. The larger part of the total expenditure for buildings comes from loans whose final payment is distributed over a series of years. Sometimes these loans cover a variety of municipal purposes, of which school buildings are only one. Often sinking funds are established for their payment, so that the burden of payment after all is somewhat evenly reduced by annual taxation. Inasmuch as payments of loans for school buildings are thus interwoven with, covered up by, and lost in the general financial operations of towns and cities, so that it is hopeless to pick them out and account for them each year, they are not called for in the blank for the annual school returns, and so are never reported. The only way left, therefore, is to capture the money expended on buildings, whatever its source, at the time it is actually expended, and to treat it as if it were immediately raised by taxation during the year of its expenditure, whether it was so raised or not."

It appears from the above that the cost of ordinary repairs should not be included in the expenditure for the support of schools. If not included, the cost per pupil this year would be $29.28, instead of $30.35.

While Cambridge expends a large amount for her schools, there are *two hundred sixteen* towns and cities in the State which make a larger expenditure in proportion to their wealth. In a list of the thirty-three cities, arranged numerically according to the percentage of their taxable property appropriated to the support of public schools for the year 1900–1901, Cambridge is the *twenty-third;* and, compared with the fifty-four towns and cities of our county, Cambridge is the *thirty-fourth.* In a list of the towns and cities of the State, arranged numerically according to the sum appropriated for each child between five and fifteen years of age, Cambridge is the *thirty-second.* In a list of the towns and cities of the State, arranged numerically according to the sum appropriated for each child in the average membership of the public schools, Cambridge is the *twenty-eighth.*

These statistics relating to the schools of the State are taken from the sixty-fifth annual report of the secretary of the Board of Education.

TEXT-BOOKS AND SUPPLIES.

At a meeting of the Board in December, the committee on supplies submitted a detailed report of the expenditures of that committee for the year. The report is as follows: —

In accordance with Section 30 of the Rules of the School Board, the Committee on Supplies submits its seventeenth annual report for the year ending July 1, 1901: —

Stock on hand July 1, 1900	$5,049 38	
Purchases and expenditures to July 1, 1901	17,951 29	
		$23,000 67
Cash sales and damages	$449 13	
Delivered to schools, officers, etc.	17,319 73	
		17,768 86
Stock on hand July 1, 1901		$5,231 81

The purchases and expenditures have been :—

For text-books	$6,364 54	
Desk and reference books	144 39	
Copy books	701 80	
Apparatus and furnishings	1,626 54	
Printing, $282 15; expressage and labor, $252.30	534 45	
Repairing books, $426 85; diplomas, $181.95	608 80	
Tuning pianos	11 25	
Miscellaneous supplies, etc.	7,740 70	
		$17,732 47
Less the value of exchanges		92 35
		$17,640 12

The net cost of text-books and supplies is as follows :—

Stock on hand July 1, 1900	$5,049 38	
Bills paid by City Treasurer	17,640 12	
		$22,689 50
Less stock on hand July 1, 1901	$5,231 81	
Cash paid to City Treasurer, sales and damages	449 13	
		5,680 94
We have, net cost of all schools and officers		$17,008 56

or an average cost per pupil of $1.203. The average cost per pupil per annum for seventeen years has peen $1.255.

The annual cost per pupil for text-books and supplies since the introduction of the free text-book law is as follows :—

Year	Cost per Pupil	Year	Cost per Pupil	Year	Cost per Pupil
1885	$1.880	1891	$1.248	1897	$1.094
1886	1.170	1892	1.149	1898	1.268
1887	1.051	1893	1.109	1899	1.225
1888	1.068	1894	1.243	1900	1.740
1889	0.960	1895	1.152	1901	1.203*
1890	1 334	1896	1.436		

* See note on next page.

	Net Expense	Cost per Pupil				
		*1901	1900	1899	1898	1897
Latin School	$1,841 38	$3.935	$6.804	$3.245	$3.594	$4.251
English High School	2,190 22	4.236	4.642	3.888	3 535	2 931
Manual Training School	2,236 07	11.707	13.515	.....	.....	.....
Training School Teachers	553 00	.704	.....	.....	.....	.....
Grammar Schools	4,405 48	1 068	1 747	1.476	.977	1.053
Mixed Schools	2,972 63	933	1 573	1 001	1 532	1 105
Primary Schools	1,822 28	.421	.396	.425	.540	.420
Kindergartens	212 20	.329	.692	.303	1.003	.634
Evening Schools	345 79	.....	.....	.....	.....	.....
Vacation Schools	25 74	.....	.. ...	.....	.....	.....
Special Teachers	84 65	.....	.....	.....	.....	.....
Officers of Board	67 51	.....	.....	.....	.....	.....
Miscellaneous expenses (not chargeable to any grade)	269 84	.....	.....	.....	.....	.....
	$17,026 79					
Less profits on sales	18 23	.....	.....	.....	.....	.....
	$17,008 56	$1.203	$1.740	$1.225	$1.268	$1.094

As stated above, the average expenditure for each pupil is less than last year, and less even than the average for the last seventeen years. No costly changes in text-books were made last year, nor was any new school, kindergarten, or laboratory fitted out.

During the financial year, 1901–1902, a piano should be bought for the Latin school, one for the Webster school, one for the Boardman kindergarten, and one for the newly established Peabody kindergarten. The committee also recommends a sloyd outfit for the Morse school, and a lantern and slides for the Harvard school to replace those destroyed by fire. The recent fire at the Allston schoolhouse will occasion an unusual expenditure of $1,000, to replace the text-books, sloyd outfit, piano, and other supplies destroyed, of which, however, only about $250 will have to be spent before November 30, 1902. The regular expenditures for text-books and supplies, estimated on the fourteen thousand four hundred ninety-four pupils in the schools on December 1, 1901, will be $18,200. Adding the probable cost of the other items enumerated above, $1,800, the sum needed will be $20,000.

The care of flags and flagstaffs has cost $148.50 during the year, and the estimate for the current financial year is $200.

* It has been the practice in past years to use the number belonging to the schools in December, in getting these averages. This year the average number belonging during the school year has been used. This changes the averages, but seems the proper basis on which to compute them.

CHANGES IN TEXT-BOOKS.

The following is the rule relating to changes in text-books: "All proposals for changes in text-books shall be made to the superintendent. If believed by him to deserve consideration, he shall appoint two persons, one of whom shall be a teacher in the service of the city, and they and the superintendent shall examine and each make a written report on the the proposed books. These reports shall be kept on file in the office of the superintendent, and shall be open to inspection by members of the Board only. Changes so considered may be recommended to the Board for adoption, when they shall be referred to the committee on text-books."

Under this rule the following text-books have been adopted by the Board during the year 1901: —

For use in the Latin school, Bouvet's Exercises in French Syntax and Composition; Lamartine's Scènes de la Révolution Française.

For use in the English high school, Bowen's Introduction to Modern French Lyrics; Enault's Le Chien du Capitaine; Guerber's Contes et Légendes; Legouvé et Labiche's La Cigale chez les Fourmis; Bullock's Introduction to the Study of Economics.

For use in the high schools, Shepard's Harmony Simplified.

For use in the Rindge manual training school, Tuft's Polyhymnia.

For use in the primary schools, Blaisdell's Child Life Primer; Carroll's Around the World, Book I.; Holbrook's Hiawatha Primer.

SCHOOL ACCOMMODATIONS.

The following is from the report of the committee on schoolhouses: —

During the year no additional building for school purposes has been completed, nor have additional accommodations been provided, so that the schoolhouses which were crowded a year ago are crowded even worse at present.

A building containing fourteen rooms and a hall, which is intended to accommodate the Washington school and some of the classes of the training school, was begun in the early spring near the Rindge manual training school. It is hoped that it will be ready to be occupied after the spring recess. The appropriation for this building was $80,000; for the work done to December 1, $59,003.64 has been paid.

Land has been purchased, plans accepted, and an appropriation of $80,000 made for a schoolhouse on Willow street; but we cannot hope that it will be ready for occupancy before the beginning of 1903.

The Allston schoolhouse was seriously damaged by fire on Thursday, December 12. This is the third time that fire has occurred in this

building. The other dates were February 20, 1896, when it cost about $800 to repair it, and April 17, 1901, when the cost of repairs was $1,308.03. The damage is now so great and the general construction and condition of the building is such that it seems unwise to repair it. There were four hundred ninety-six pupils belonging to this school at the time of the fire, and there were many tenement houses near the building. It is evident, therefore, that a schoolhouse of the capacity of the one destroyed is needed on this site or in the immediate vicinity.

The city council adopted the following on July 2 : — Ordered, "That an appropriation is hereby made in the sum of thirty thousand dollars ($30,000.00), for the purpose of putting improved sanitary arrangements into the Lassell, Gannett, Riverside, Tarbell, and Stearns schoolhouses; also for removing the present boilers at the manual training school, and substituting boilers of sufficient capacity for furnishing power and heat for the entire group of city buildings in the vicinity of said manual training school. Said sum to be provided for by a schoolhouse loan to be hereafter authorized."

From the amount so appropriated the following sums were expended during the summer vacation on special repairs and changes in sanitary arrangements : —

Gannett	$2,536 57
Lassell	3,684 66
Riverside	3,453 70
Tarbell	3,853 80
Total	$13,528 73

To December 1, $10,062.80 was expended on the boilers, subways, etc., at the Rindge manual training school and the new school building, leaving $6,408.47 still available for these buildings. This brings the expenditure on account of the new building to $96,471.27. The amount expended under the regular appropriation for care and repairs of school buildings is $76,128.52. This may be classified as follows : —

Janitor service	$34,033 66
Janitors' supplies	1,779 41
Mrs Johnson, care of Cedar Hall	180 00
Fuel	16,494 36
Gas and electric lighting	2,737 22
Furnishings	1,069 48
Repairs to the Allston schoolhouse, fire of April 17	1,308 03
Painting and decorating the Felton schoolhouse	1,001 50
Painting and decorating the hall of the English high school	297 00
Painting and decorating the Peabody schoolhouse	550 00
Painting and decorating the Wellington schoolhouse	549 00
Changes in heating at the Ellis schoolhouse	352 12
Changes in heating at the Taylor schoolhouse	712 12
General repairs	15,064 62
Total	$76,128 52

Nothing has been done to improve the drainage at the Boardman and Sargent schools, or the ventilation at the Holmes, Reed, Riverside, and Tarbell. The seats have not been changed at the Thorndike, nor has any tinting been done at the Agassiz or Dunster as was recommended by the committee. The kindergarten floors to which attention has been called are still rough and unfit for rooms used for this purpose.

As last year, the pressing need is for a schoolhouse near the Cambridge Field and this is all the more urgent now that the Allston schoolhouse is useless. It will probably be a year at least before the building on Willow street is completed. The need of a schoolhouse in Ward Four is more and more apparent, all the school buildings in that ward being filled to their utmost capacity. The Willard has sixty in one room and averages forty-nine in the eleven rooms, and the rooms are smaller than those in more recent buildings. At the Morse school one room has sixty-three pupils and others are practically full.

PLAN OF THE SCHOOL REPORT.

For twenty years the subject matter and arrangement of the statistical part of the school reports have remained essentially unchanged; and for the past five years each report has contained certain definite information, relating to the organization and conduct of the schools, such as is frequently sought by parents and persons interested in school affairs. The same general plan has been followed in preparing this report. In one respect, however, a change has been made. The cost of the schools per pupil, as shown in all the tables of this report, is based on the average number of pupils for the school year, and not, as heretofore, on the number of pupils belonging to the schools during the first week in December. Neither method is entirely satisfactory. The difficulty is that the school year and the financial year do not correspond. The school year ends with June, and the financial year with November. The number belonging to the schools during the first week in December may or may not represent the attendance during the year, for during the last months of the year a private or parochial school may have been opened, as is the case this year, or some prevailing sickness may have taken a large number from the schools. The average attendance for the school year would not be precisely the same as the average for the months of the financial year, but it would be a uniform basis for finding the cost per pupil from year to year, and not be liable to the objections of the former method.

Latin School. The following table shows the membership of the Latin school and the cost of instruction from year to year for the past ten years :—

December	Average Number of Pupils	Number of Teachers in December	Cost of Instruction	Cost per Pupil	Number of Graduates
1892.....	213	10	$12,751 07	$59 86	22
1893.....	251	11	13,425 66	53 49	23
1894.....	303	12	14,359 66	47 39	27
1895.....	354	14	15,059 58	42 54	25
1896.....	373	15	16,525 00	44 30	34
1897.....	358	16	17,335 00	48 42	35
1898.....	362	16	18,325 00	50 62	43
1899.....	371	19	19,318 68	52 07	43
1900.....	404	22	21,819 00	54 01	39
1901.....	468	22	23,710 34	50 66	56

The cost of the Latin school to the city is less than the above sums by the amount received from the Hopkins Fund, which can be used only for classical instruction, and by the amount received for the tuition of non-resident pupils. This year the amount received from the Hopkins Fund was $637.61; for the tuition of non-resident pupils, $931.

The course of study is arranged for five years, or for four years, and is almost wholly decided by the requirements for admission to Harvard College. Twelve per cent of all the graduates have completed the work in four years. The following is the rule relating to the admission of pupils to the high schools: "Pupils who have received the diploma of a Cambridge grammar school may, on recommendation of the master, be admitted to either high school without an examination. For other persons who desire admission, an examination shall be held at the beginning of the autumn term under the direction of the superintendent, but pupils who are qualified to join existing classes may be admitted at any time on application to the principal. No pupil from any grade in a grammar school shall be examined who does not present a satisfactory certificate that he has pursued his studies during the summer vacation."

From three-fourths to four-fifths of the graduates are usually recommended for admission without an examination. About one-half of the remaining part study during the summer vacation, as required by the rule, and take an examination in September. Pupils who pass a fairly good examination are permitted to attend either high school until the Christmas vacation, at which time their connection with the school as regular pupils ends unless their work has been satisfactory.

Diplomas of graduation signed by the mayor and the head master of the school are awarded to pupils of the high schools who have successfully completed the course of study or its full equivalent, and have sustained a good character.

For non-resident pupils the tuition is $80 a year, payable in advance,—one-half at the beginning and the other half at the middle of the school year. The sessions of the school begin at 8.30 A. M., and end at 1.30 P. M.

The following is from the report of the head master of the Latin school: —

In September, 1901, four hundred eighty-one pupils were registered. Of seventy-two pupils who had an option between Greek and a modern language, forty-four chose Greek, twenty-one German, and seven French. Of seventy-eight pupils who had an option between chemistry and physics, sixty-eight chose chemistry, and ten physics.

The school acknowledges with pleasure the gift of a number of valuable pictures and casts from its friends. Under the direction of the

Alumni Association a movement is under way to canvass thoroughly the various classes for money to be used in purchasing works of art for the school. The sum needed is $5,000. When this money is raised, some definite and harmonious scheme for the complete decoration of the building will be carried out. Seven classes have already responded generously, namely, the classes of '57, '58, '65, '66, '71, '77, and '93.

During the year the following purchases have been made from the money previously presented to the school: —

From that given by Messrs. Edwin A. and Stanley B. Hildreth: 1. The cast of the Frieze of the Parthenon (completed). 2. Cast: bas-relief of choir boys at Museum of Florence, by *Luca della Robbia*. 3. Large framed photograph: The Caryatides from the Erechtheum. From that given by Mr. Frederick P. Bonney: 1. Large framed photographs of Washington and Franklin, and four group pictures of American authors.

In addition to the above the following gifts have been received: —

1. Large framed photograph: Sistine Madonna, from Mr. William A. Munroe. 2. Large framed photograph: Stratford-upon-Avon, from the class of 1874, Cambridge high school. 3. Large framed engraving: Horses' Heads, by *Rosa Bonheur*, in memory of Miss Miriam J. Fitton, class of 1893, given by her mother. 4. Large framed photograph: Zeus, from the class of 1901. 5. Cast: bas-relief of choir boys at Museum of Florence, by *Luca della Robbia* (companion piece to the one mentioned above), from the editors of the *Latin and High School Review*.

English High School. The following table shows the membership of the English high school and the cost of instruction for ten years Until January 1, 1899, the pupils of the Rindge manual training school were included in the membership of the English high school. This explains the smaller number of pupils since 1898: —

Year	Average Number of Pupils	Number of Teachers in December	Cost of Instruction	Cost per Pupil	Number of Graduates
1891.....	480	16	$18,767 50	$39 10	48
1892.....	529	19	20,488 50	38 73	77
1893.....	569	19	22 095 00	38 83	95
1894.....	611	21	23,051 00	37 73	91
1895.....	648	21	24,369 40	37 60	89
1896.....	632	21	24,612 00	38 94	72
1897.....	644	23	25,194 09	39 12	90
1898.....	685	23	26,051 17	38 03	97
1900.....	514	24	25,250 50	49 13	68
1901.....	517	24	26,265 58	50 80	60

There are four courses of study, — a general course, a course preparatory for the scientific schools, a commercial course, and a domestic science course, each arranged for four years. The commercial course was formerly a two years' course, and the course in domestic science has recently been introduced.

It is the plan of the courses that all pupils in the school shall pursue substantially the same subjects for their first year, but thereafter shall have increasingly divergent studies, opened to choice within reasonable limitations, and determined largely by aptitude and expectation of subsequent career.

These general statements apply to all the courses : —

1. All pupils will have a weekly exercise in music (choral singing).

2. Drawing is required of all once a week for the first year, and is opened to all as an extra subject during the remaining three years.

3. It is expected that no two foreign languages will be begun the same year ; that any foreign language once begun will ordinarily be continued for two years, and that a modern foreign language will not be continued longer than two years, except by work in conversation.

4. Variations from the courses as stated are permissible with the approval of the head master.

The requirements for admission to this school and the rules relating to the granting of diplomas are the same as for the Latin school.

For non-resident pupils the tuition is $80 a year, payable in advance, — one-half at the beginning and the other half at the middle of the school year. The sessions of the school begin at 8.30 A. M., and end at 1.30 P. M.

The following is from the report of the head master of the English high school : —

There were seven boys from the English high school who took thirty-nine examinations at the Lawrence Scientific school, passing in thirty-four. Two of the five failures were in subjects in which the candidates were recommended by the school. Eight honors were taken by four boys. At the Institute of Technology nine boys and one girl took forty-five examinations, passing in forty-one. Of the four failures two were in subjects in which the candidates were recommended by the school. All who took final examinations were accepted " clear," and four of them anticipated by examination seven subjects of the freshman year.

The domestic science course is proving its usefulness and commanding increased interest among both pupils and parents. Gratifying evidence of the approval of this work in the homes of the girls who take it has recently been received. The numbers in the course are much the same as last year, though the sloyd pupils are more numerous, and those in cook-

ing somewhat less. The variations are not significant. Experience is helping to demonstrate what portions of the large field of the domestic arts and of household hygiene are best suited to the needs of high school pupils, with the result that the quality of the work is advancing each year. It will be remembered that the distinctive subjects of this course fill only one-third of the pupil's time for the last three years in the school. Subjects of a purely cultural character occupy the same pupils two-thirds of their time or more.

The commercial work of the school is developing naturally and wisely. The bookkeeping, and the stenography and typewriting, continue to enlist and hold the interest in a marked degree, leading to extra work at personal sacrifice of the pupil in many instances. It is evident that it will be wise to plan for some continuance of stenography and typewriting in the way of practice through the last year, if real efficiency is to be expected upon graduation. This year for the first time the study of economics has been taken in the final year of the commercial course. A class of twenty-six pupils, averaging about seventeen and a half years in age have devoted an hour a day to this subject. First they made a study of the different occupations pursued in Cambridge, with detailed reports on the business of individuals personally known to members of the class. In this way they came to understand the factors in production,—man, nature, capital; also to know the concrete meaning of such terms as landlord, capitalist, manager, wage earner, rent, interest, labor, taxes, and profits; and still further to discover the common purpose of all work, the creation of what is useful, and the different ways in which utility is created. The class appears to be interested and to find the instruction within its grasp. We are feeling our way in the selection of material and in choice of methods, and already see ways in which to improve the work another year.

The result of strengthening the commercial course by the addition of stenography and typewriting and of economics is seen in the relatively larger numbers now found in our upper classes. As was hoped, there is an increased desire on the part of the commercial pupils, who formerly left in large numbers at the end of the second year, to remain through the four years.

The work carried on for the benefit of deficient pupils of the fourth class, who under the strict operation of the rules might have been sent away from the school, was even more successful than heretofore. The young teachers, under supervision, were successful in discipline, and did helpful work with these pupils. The class which was in charge of one of our own experienced teachers was still more successful. The fruit of this effort is seen in the fact that a division formed from this "Fifth

Year Class" has practically finished the required algebra work in the first half of their second year, and will be able to make some solid acquirements in geometry by the end of the year. They have not only been kept in school, but have been brought to a higher state of efficiency than has before been practicable. This is a distinct gain from every point of view.

Within the last year the school has received from the editors of the *Latin and High School Review* a bust of Louis Agassiz, the third gift from that source within three years. The class of 1901, also, since graduation, has sent a pleasing reminder of their interest in the form of a gift of fourteen volumes of history and literature, all immediately useful in forwarding the regular work of the school.

It seems to the head master very desirable that the walls of the assembly hall, recently tinted and decorated in very attractive style, should bear portraits of the former principals of the school. They have been few in number, only six since the high school was established on the fourth of October, 1847, and four of these are yet alive. It seems especially important that the features of Mr. Elbridge Smith and Dr. William J. Rolfe should be caught upon the canvas before the ills incident upon advancing years make the task more difficult. It will never be easier than now to search out and obtain portraits of the two deceased principals, Mr. Osgood Johnson, and Mr. Lyman R. Williston. And the pupils of the latest two, Dr. William F. Bradbury, and Dr. Frank A. Hill, will surely prefer to see their faces looking down in the way they looked in the days of their familiar service. Are there not friends of the school who feel prompted to initiate a movement to provide these mementoes of a useful and honored past, as a help aud inspiration for the school of the present and the future? The newly formed "Cambridge English High School Alumni Association" would form an excellent agency for the execution of such an enterprise.

Rindge Manual Training School. This school was founded by Mr. Frederick H. Rindge in 1888. For ten years he paid the current expenses of the manual training department, the city providing for the academic instruction. January 1, 1899, a complete transfer of the entire plant was made to the city, and the school became an integral part of the school system.

The following table shows the membership of the manual training school and the cost of instruction for two years:—

Year	Average Number of Pupils	Number of Teachers December 1	Cost of Instruction	Cost per Pupil	Number of Graduates
1900	192	14	$17,825 73	$92 84	16
1901	191	14	17,988 33	94 18	21

The cost of the manual training school to the city is less than the above sums by the amounts received from Harvard University for the instruction of a class of students during the summer vacation, and for the tuition of non-resident pupils. The amount received this year from both sources was $4,877.50.

The course of instruction covers four years. The sessions are five and one-half hours a day, instead of five, as in the other high schools. About one-third of the time is given to the work of manual training, and the remainder to the subjects usually taught in high schools, with the exception of Latin and Greek.

The requirements for admission to this school and the rules relating to the granting of diplomas are the same as for the Latin school.

For non-resident pupils, the tuition is one hundred fifty dollars a year, payable in advance,—one-half at the beginning, and the other half at the middle of the school year. The sessions of the school begin at 8.30 A. M., and end at 2 P. M.

The following is from the report of the head master of the Rindge manual training school: —

Since the city assumed the responsibility of the Rindge manual training school the growth has been steady, and the work of the teachers marked with enthusiasm and a purpose to make successful men of the boys entrusted to their care. At the end of the fall term we registered two hundred fifty-three boys, as compared with two hundred sixteen at the corresponding time in 1900.

Our entering class is too large to be well cared for in three divisions, and present indications are that next year's third class will be much larger than the present one; next fall it will probably be necessary to increase the shop accommodations and the number of teachers to care for the increased numbers.

Last April we sent to Buffalo four panels of our shop work and a complete set of drawings, for exhibition in the Pan-American Fair. In December notice was received from the director general that *a gold medal* had been awarded the exhibit. This exhibit is now at the fair in Charleston, South Carolina.

The apparatus put into our gymnasium has been a source of pleasure and profit to the pupils. It was hoped that the city council might establish an outdoor gymnasium in the rear of the public library for the benefit of the large number of pupils in the four schools, but the trustees of the library decided that the space is too limited for the purpose, and that there were other objections to the plan. Some provision, however, should be made for outdoor exercise for these pupils.

The city has provided us with convenient subways between the shop basement and our science building, and the new building is also connected by subway with our science building. At present we are much in need of additional rooms for our academic work. It is hoped that some of the rooms in the new building may be ready for our use before the first of March.

The number of tuition pupils, that is, of those coming from out of town and paying to the city $150 per year for the privilege of attending our school, is unusually large this year, there being twenty who are thus taking advantage of what Cambridge offers its boys free of charge.

The number of pupils who desire to learn to care for the engine and to fire the two large boilers (250 horse power) has increased to a marked degree. This work is not a part of our prescribed course, but is allowed to those who desire to take it as an extra. The class now consists of eight pupils.

The additional lathes installed during vacation are proving very valuable. Our foundry has been enlarged and much improved this year and is now a credit to the school. The dining room has been provided with seats and extra tables. The lunch counter is under the charge of Mr. Ralph D. Perry, a former pupil of the school. Under the close supervision of the teachers, the athletic exercises of the school are becoming a factor for good and should receive the encouragement of the committee. We wish to thank the committee on supplies and the agent for the careful consideration they have given to each of our requests for tools and supplies. One additional teacher will probably be required next September.

Manual Training in Other Schools. The statutes require that every town and city of twenty thousand or more inhabitants shall maintain, as part of both its elementary and its high school system, the teaching of manual training. The Rindge manual training school gives the required instruction to boys of the high school grade, and provision is made in the English high school for girls of this grade, sloyd being taught in the second year, and cooking in the third. Sewing in the grammar schools may be considered as meeting the requirements for girls in the grammar

grades. For two years provision was made at the Allston school for instruction in sloyd for the boys of that school, and for two classes of twenty pupils each, one from the Roberts school and the other from the Wellington. The Allston schoolhouse was burned December 12. No provision has yet been made for these classes, but probably a room in the Roberts school will be used. The recommendation of last year has been carried out, and two additional rooms have been fitted up, one in the Putnam schoolhouse, Ward Three, and another in the Shepard schoolhouse, Ward Five. These rooms are now used for evening school classes, and arrangements will soon be made for their use for the day schools. The work of manual training in all the schools is under the direction of the head master of the Rindge manual training school.

Wellington (Training) School. This school was opened in September, 1884, and differs from the other schools in this respect, — all the grades, except the eighth and ninth, are taught by young teachers. Their work, however, is done under the immediate supervision of a master and three assistants, who are held responsible for the instruction and management of the school. For several years the seventh grade has been taught by a graduate of the training class.

The object of conducting a school on this plan is to give Cambridge young women who desire to teach, and who have made special preparation for the work, an opportunity to gain experience under conditions favorable to their own success, and without prejudice to the interest of their pupils.

Graduates of the English high school or of the Latin school, who have also graduated from one of our state normal schools, are preferred candidates for the position of teacher in this school. Other persons of equal preparation may be appointed.

The required term of service is one year. Teachers are appointed on probation, and may be excused or dismissed at any time by the superintendent, with the approval of the committee on the training school.

No teacher is considered a graduate of the school until by vote of the training school committee she is admitted to the graduate class, which is known as Class B.

The money compensation for the first three months, and until satisfactory service is rendered, is at the rate of two hundred dollars a year. For the remaining part of the year it is at the rate of two hundred fifty dollars.

Graduates temporarily employed as teachers in this school are paid at the rate of three hundred dollars a year. Graduates selected to act as substitutes in any school are paid at the rate of four hundred fifty dollars.

That the direct influence of the school may be continued, it is the duty of the master, or of one of the supervising teachers, occasionally to visit the schools of the graduates who are teaching in Cambridge.

The school contains all the grades of the grammar and primary schools and a kindergarten, the number of pupils being nearly nine hundred.

By the rules of the school board the superintendent is authorized to employ as many substitutes and temporary teachers as may be necessary to take the places of absent teachers. These teachers are usually assigned to the training school, when not otherwise employed, that there may be at this school a sufficient number of teachers to make it practicable for the members of the training class to visit other schools.

The following is from the report of the committee on the training school :—

At the opening of the school in September there were about nine hundred pupils, including those in the kindergarten. On account of the crowded condition of the school, two classes have to be accommodated in the assembly hall and one in the basement. During the year twenty-threeteachers have been admitted to the training class. Several of these have withdrawn because of unsuccessful work or on account of ill health.

The number of teachers connected with the training class since the organization of this school, not including those admitted within a year, is three hundred eighty-seven. Of this number, sixty-nine left the school before the end of the required term of service, or failed to meet the requirements for graduation. The number of graduates is two hundred sixteen. More than 90 per cent of these have found positions in the schools of Cambridge, and about 5 per cent have been employed in other cities. At the present time 44 per cent of the teachers in our grammar and primary schools, not including those in the Wellington school, are graduates of this school.

On account of the delay in building another schoolhouse in Ward Two, the Wellington school is still in a crowded condition, but it is expected that relief will come in the near future.

Grammar Schools. The number of pupils in these grades on the first of December was six thousand eight hundred fifty-four, and the number of teachers, including masters and special teachers, was one hundred seventy-seven. The average number of pupils in these grades during the school year was six thousand four hundred eighty-three.

The cost of instruction for each pupil for the year has been $21.16. This does not include the cost of supervision.

For non-resident pupils the tuition is $30 a year, payable in advance, — one-half at the beginning and the other half at the middle of the school year.

The course of study is for six years, but the schools are so classified as to give the pupils an opportunity to complete the course in four years or in five years. The average age of those who entered last September was nine years nine months. The number of graduates was five hundred sixty-five, their average age being fourteen years eleven months. Of these, 6 per cent completed the course in four years, 28 per cent in five years, 50 per cent in six years, and 16 per cent in seven years or more.

Pupils are promoted by classes from the primary schools at the beginning of the autumn term; but individual pupils may be promoted at other times, if it is deemed expedient by the supervisor of primary schools and the superintendent.

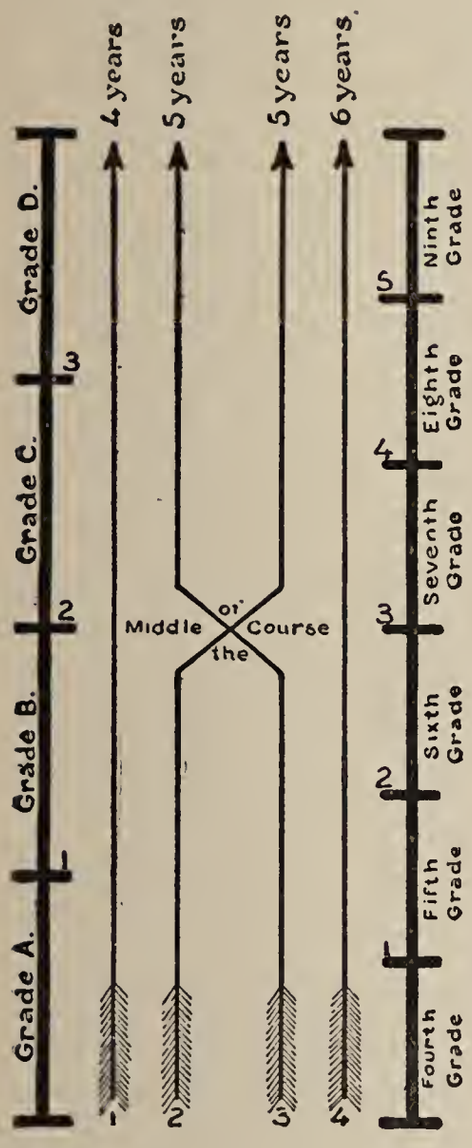
Promotions from grade to grade in the grammar schools, and from the grammar to the high schools, are made by the teachers under the direction of the masters and the superintendent. Pupils qualified to join existing classes may be admitted at any time on application to the master of the school. No regular pre-announced examinations are held in these schools, but the results of such written exercises and reviews as the teachers and masters may require from time to time may be used as a part of the basis of promotion.

The thoroughness with which the work is done in any school is shown in part by the ability of the pupils to do the work in the high schools. The pupils are admitted to the high schools on trial; and, by the rule of the high school committee, any pupil who fails to maintain a suitable rank is reported to that committee, and no pupil thus reported can continne in either high school, except by special vote. For two years, however, provision has been made by which these pupils have been allowed to remain in the English high school, and receive such instruction as would best fit them to enter again upon the regular work of the school at its reorganization in September.

In the grammar schools special teachers are appointed to help such pupils as seem able to do the work in less than six years, and to aid those who without personal instruction would require more than six years. This action of the committee removes the most serious objection to the graded system of schools.

The course of study is divided in two ways: (1) into six sections; (2) into four sections; each section covering a year's work. Pupils taking the course in six years are classified in six grades, called the fourth, fifth, sixth, seventh, eighth, and ninth grades. Those taking it in four years are classified in four grades, called grades A, B, C, and D. When pupils

are promoted to the grammar schools they begin the first year's work together. After two or three months they are separated into two divisions.



One division advances more rapidly than the other, and during the year completes one-fourth of the whole course of study. The other division completes one-sixth of the course.

During the second year the pupils in grade B are in the same room with the sixth grade. At the beginning of the year they are five months (one-half the school year) behind those in the sixth grade. After two or three months, grade B is able to recite with the sixth grade, and at the end of the year both divisions have completed one-half the course of study — the one in two years, and the other in three years. The plan for the last half of the course is the same as for the first half, the grades being known as the seventh, eighth, and ninth in the one case, and as C and D in the other.

There are also two ways of completing the course in five years: (1) any pupil who has completed one-half the course in two years may at the end of that time be transferred to the seventh grade, and finish the course in three years; (2) any pupil who has completed one-half the course in three years may at the end of that time be transferred to grade C, and finish the course in two years. In both cases these changes can be made without omitting or repeating any part of the course.

It is now ten years since the schools were first classified on this plan. During this time five thousand two hundred eighty-three pupils have graduated from the grammar schools. Of this number, 8 per cent completed the course in four years, 30 per cent in five years, 47 per cent in six years, and 15 per cent in seven years or more.

Of the number who entered the Latin school during the past seven years, 15.1 per cent did the work in the grammar schools in four years, 46.5 per cent in five years, and 38.4 per cent in six years. Of those who took the general course in the English high school, 11.5 per cent did the work in the grammar schools in four years, 40 per cent in five years, and

---

Arrow No. 1 indicates the four years' course; grades A, B, C, D. Arrow No. 2 indicates one of the five years' courses; grades A, B, 7, 8, 9. Arrow No. 3 indicates the other five years' course; grades 4, 5, 6, C, D. Arrow No. 4 indicates the six years' course; grades 4, 5, 6, 7, 8, 9.

48.5 per cent in six years; of those who took the commercial course in the English high school, 8.8 per cent did the work in the grammar schools in four years, 38.6 per cent in five years, and 52.6 per cent in six years. Of those who entered the Rindge manual training school, 6.9 per cent did the work in the grammar schools in four years, 36.2 per cent in five years, and 56.9 per cent in six years.

During the past seven years, more than 50 per cent of the pupils entering the high schools did the work in the grammar schools in less than six years, 41.1 per cent doing it in five years, and 11.2 per cent in four years. It does not follow, however, that because so many did the work in less than the full time, the plan is a good one. The value of the plan is shown rather by the thoroughness with which the work has been done, not in one year only, but in a series of years. The results of the first year's work in the high schools would seem to be a test of this thoroughness. The records in these schools show that for seven years the average per cent of the pupils who were four years in the grammar schools was higher than the per cent of those who were five years in the grammar schools, and that the per cent of those who were five years in the grammar schools was higher than the per cent of those who were six years in the grammar schools.

The average per cents of the first year's work in the different high schools for seven years are as follows:—

In the Latin school, the average per cent of the pupils who completed their grammar school work in four years is 79.4; of those who completed it in five years, 74.8; of those who completed it in six years, 70.1.

In the general course of the English high school, the average per cent ot the pupils who completed the grammar school work in four years is 78.3; of those who completed it in five years, 75.8; of those who completed it in six years, 73.

In the commercial course of the English high school, the average per cent of the pupils who completed the grammar school work in four years is 73.4; of those who completed it in five years, 71.8; of those who completed it in six years, 69.9.

In the Rindge manual training school, the average per cent of the pupils who completed the grammar school work in four years is 76.9; of those who completed it in five years, 67.5; of those who completed it in six years, 67.

The results given above are based on the first year's work in the high schools. This year for the first time results have been obtained based on the full course in the high schools. Last June fifty-six pupils were graduated from the Latin school. Of this number, forty-three were graduates of the Cambridge grammar schools. Of these forty-three,

eleven did the work in the grammar schools in four years, and their average per cent for their Latin school course was 83.4; twenty-three did the work in the grammar schools in five years, and their average per cent for their Latin school course was 76.6; nine did the work in the grammar schools in six years, and their average per cent for their Latin school course was 75. One pupil who did the work in the grammar school course in four years, completed the work in the Latin school in four years. Two pupils who did the work in the grammar school course in five years, completed the work in the Latin school in four years.

Sixty pupils were graduated from the English high school last June. Of this number, fifty-two were graduates of the Cambridge grammar schools. Of these fifty-two, six did the work in the grammar schools in four years, and their average per cent for their high school course was 78.4; twenty-one did the work in the grammar schools in five years, and their average per cent for their high school course was 78.2; twenty-two did the work in the grammar schools in six years and their average per cent for their high school course was 77.6; three were seven years in doing the work in the grammar schools and their average per cent for their high school course was 70.

These results do not indicate as thorough preparation for high school work as is desirable, but they do show that there are some pupils who can do the same amount of work as others in less time, and do it as well and even better. If the pupils who spent only four or five years in the grammar schools should have remained longer, it is equally true that the time should have been lengthened for those who had been in these schools six years. In every course of study provision should be made for the more rapid advancement of a part of the pupils, or for additional work for those able to do it.

Primary Schools. The number of pupils in these grades on the first of December was five thousand six hundred ninety-two, and the number of teachers was one hundred forty-three. The average number of pupils in these grades during the school year was five thousand eight hundred forty.

The cost of instruction for each pupil for the year has been $15.93. This does not include the cost of supervision.

For non-resident pupils the tuition is $20 a year, payable in advance, — one-half at the beginning and the other half at the middle of the school year.

The course of study is for three years. Children five years old are admitted to the first grade at the beginning of the school year and during the first week in March. Pupils qualified to join existing classes may be

admitted at any time on application to the principal. At the present time, 41 per cent of the pupils are in the first grade; 31 per cent in the second; and 28 per cent in the third.

One thousand four hundred sixty-seven pupils graduated last June, at an average age of nine years seven months. Of these, 4 per cent completed the course of study in less than three years; 61 per cent in three years; and 35 per cent in more than three years.

Promotions from grade to grade in the primary schools, and from the primary to the grammar schools, are made by the primary teachers, under the direction of the supervisor of primary schools and the superintendent. Promotions by classes are made annually at the beginning of the autumn term; but individual promotions are made at other times if it is deemed expedient by the supervisor of primary schools and the superintendent.

Pupils are promoted to the grammar schools on trial, and those who show by their work that they are unprepared are returned to the primary schools on the approval of the supervisor of primary schools and the superintendent.

Once a month the teachers of each grade meet the directors of special studies and the supervisor of primary schools. These meetings are held in the English high school building on Wednesday afternoons, half an hour after the close of the schools. The work for the coming month is planned; criticisms and suggestions in regard to methods are made; and questions from the teachers are answered and discussed.

Occasionally specimens of written work from all the pupils are brought for examination. In this way the amount of work done in the schools is made somewhat uniform; new teachers are kept informed as to the requirements, and pupils lose less time when a change of teacher or school becomes necessary.

The supervisor of primary schools writes as follows:—

The changes made in the course of study, which reduced the number of lessons in drawing and nature work, and gave an hour of unassigned time each week, were welcomed by all the teachers, and many of them feel confident that the final results in the two studies mentioned will be even more satisfactory than before.

During the past year an earnest effort has been made to secure satisfactory results in spelling. The teachers of the first and second grades sent in lists of words, and from these lists the words most generally called for have been selected, thus making a common stock of words to be added to by each teacher according to the needs of her pupils.

Experience shows that although many children remember best what they see, many others remember more readily what they hear. For this reason much more time is now given to oral spelling than formerly.

In discussing methods of teaching spelling, Mr. Edward R. Shaw, the dean of the school of pedagogy, New York University, writes as follows: "From the experiments made and the verification of the conclusions in actual school application, I am convinced that the motor apparatus used in speech should be employed to a large extent in teaching spelling. * * * And in that preparation the letters should be grouped into syllables and the syllables pronounced according to the method of a generation or two ago. * * * If we would give the vocal organs training, we must give them work to do in clear and exact articulation and enunciation. There is no other exercise in the schoolroom comparable to this oral preparation of spelling lessons and the pronunciation of each syllable in the manner which I have indicated to secure these most desirable results. * * * Care then in the right kind of oral preparation, with considerable oral test before writing, training pupils to build up words by using the small unities into which words can be divided, is a method of teaching spelling productive of the best all-round results."

Last June an exhibition of desk work was planned, with the object of showing how the special studies might be correlated with and made helpful to the written language. Although this came in the crowded part of the year, the response from both teachers and pupils was most enthusiastic, even the children who had been less than four months in school sending in creditable pen and ink work. The results were so gratifying and helpful, and the interest taken in them so great, that it is hoped there will be an opportunity to repeat the experiment this year.

Kindergartens. There are fourteen kindergartens. The number of pupils on the first of December was seven hundred six, and the number of teachers was twenty-five. The average number of pupils during the school year was six hundred forty-five.

The cost of instruction for each pupil for the year has been $24.54. This does not include the cost of supervision.

The following is from the report of the committee on kindergartens: —

The principal of the Willard kindergarten, Mrs. Ellen A. Watson, was granted leave of absence for the school year ending June, 1901. On account of severe illness she has not yet been able to resume her duties. During her absence, Miss Alice V. McIntire, the assistant, has been acting principal. Miss Caroline A. Wolcott, the assistant at the Dunster kindergarten has also been absent on account of illness since last April. The opening of a parochial school in September reduced the number of pupils in this kindergarten and in the Lowell, and therefore no assistant has been required in either kindergarten since that time.

A new kindergarten, with thirty pupils and one teacher, was established in the Peabody school building December 2, 1901. The establishment of this kindergarten has been earnestly urged by the parents in the neighborhood for some time. It provides for the children in the Agassiz and Peabody districts, and a large increase in the number of pupils may be expected in the spring term.

Thirteen mothers' clubs connected with the kindergartens serve to bring the mothers and teachers together at least once a month. Several of the clubs have established a "fathers' night," with marked success. The teachers visit the children in their homes once a term or oftener.

In many ways the mothers show a keen appreciation of the kindergarten, not only attending the monthly meetings, but taking frequent opportunities of observing the children at their daily work. Whenever this interest and sympathy are extended to the higher grades, both teacher and pupil are benefited. Last summer one of the mothers' clubs supported a vacation kindergarten, with two teachers, for four weeks, and not only provided for the children in their own district, but received as many as they had room for from another district.

The "stamp-saving" system has been introduced into some of the kindergartens by ladies interested in the work.

In October of this year an association of the teachers of the Cambridge kindergartens was organized for mutual improvement.

Special Studies. The committee on special studies has the supervision of the instruction in nature study, drawing, music, physical training, and sewing.

Nature Study. The work in nature study includes the study of plant and animal life with some study of minerals and of weather phenomena.

The study of plants was first undertaken, and still makes up the larger part of the work. The study of animal life consists mainly of lessons on insects and birds. The mineral work is confined to lessons on common metals and on building stones.

Plants are studied in grades one to four inclusive; insects in grades one and two; birds in grades three and four; weather phenomena in grades one to three inclusive; and minerals in grade four only.

Specimens chosen for study are those in which the pupils have a present interest, and all work is based on present experience. It is kept well within the capabilities of children, yet novel enough to require their best effort. Wherever it can be made to blend with other lines of school work, this is done.

The results sought are increasing knowledge of facts gathered by observation; familiarity with environment; and a growing sympathy with nature.

The following is from the report presented by the committee on special studies: —

In planning the nature work for the year, it seemed best to give prominence to those things that were nearest to the pupils' interests and environment. Whatever of growth or change there has been in our work has been in accordance with this thought.

In September the pupils of the first grade studied the wild flowers which they were able to find; in October, the autumn leaves; in November, the fruits found in nearby markets; in December, the evergreens. These gave place in the spring to buds and seeds, and later to the early wild flowers.

The second grade reviewed and extended the work of the first year, finding new specimens and new facts in regard to them.

The third grade were able to do more thoughtful work, grouping and comparing the specimens studied. In the grammar grade some study of minerals during the winter, and of birds and their nests in spring and fall, was introduced.

All lessons given have been arranged to parallel the changing seasons, and all specimens used have been those appropriate to the time of year. Each month one thought has been made a center about which to group all the work of the month. This thought changes with the grade so that there is no sameness in the work, each lesson being based on one that has been given and leading up to one to come. There is, therefore, a sequence and a grading in the work.

Much that is best in the nature work is and should be interwoven with other lessons. The habit of examining specimens is growing among the pupils. More voluntary work outside of school, — simple but genuine, — is being done. This is a step in the right direction. The pupils should learn to make the most of nature out-of-doors, in the school yards, and parks. We must depend for permanent gain more on the quality than on the quantity of work done, and more on the habit of seeing than on the memory of what has been seen.

Drawing. The course of instruction in drawing in the primary and grammar grades includes form, color, and designing.

The study of form, by means of type models and drawing, is begun in the first primary year, and is succeeded in the grammar grades by object drawing, drawing with instruments, and drawing from nature. This last subject receives especial attention during the spring and autumn months.

Color is studied in all the grades, colored tablets being used in the primary grades and water colors in the grammar grades. Harmony and

mixing of colors are treated as a science in special exercises; while color skill is artistically expressed in original designs, historic ornament, and nature study.

In design, attention is given both to construction and decoration, embracing a large variety of subjects.

In the English high school, drawing is a required study the first year, and is carried forward upon a plan of which the following is an outline: —

Drawing from objects and from casts, drawing from nature of plant form, drawing to scale, designing (constructive and decorative), and color harmony.

Drawing, designing, or water-color painting, may be taken as an elective study after the first year. The course of lessons includes landscape, still-life, and advanced designing.

In the English high school, the instruction in drawing is given by the director of drawing and his assistant. In the primary and grammar grades, it is given by the teachers under the supervision of the director and his assistant.

In the Rindge manual training school, there are two teachers of drawing, one of mechanical drawing, and the other of free-hand, and the work is done under their immediate instruction.

The following is from the report presented by the committee on special studies: —

Owing to changes made in the general course of study last year, it became expedient to adjust the course in art study in accordance with the new time schedule. This has been accomplished in such a way as to make the teacher's work in this study less complicated. Each teacher will have her entire part of the course in the form of a booklet fully illustrated, thus making separate drawing manuals superfluous in the future.

This outline is further intended as an object lesson to the pupils in patience, thoughtfulness, and industry—essential qualities for success in any line of art work.

The custom of inviting the teachers to meet the director of drawing one evening each week during the winter months has been continued this year with a larger attendance than usual. There is evidence that a healthy interest in the subject prevails generally in the schools.

The limited amount of time (one lesson period per week) allowed for art study in the English high school precludes the possibility of any very high results being attained there, as even double that amount of time would be considered short for exercises that properly follow the work of the ninth grade. However, for the limited time given to it, the classes

are doing good work on a line of topics designed so as to meet these particular conditions.

Music. Instruction in music by the National or Mason system is given by the regular teachers in the primary and grammar grades, and by the director of music in the Latin school and English high school. All the schools, except the Rindge manual training school, are under his supervision, and every pupil who is capable of learning to sing is required to give attention to the subject.

Fifteen minutes a day in primary, and ten minutes a day in grammar grades, are devoted to this study ; and pupils are taught to sing and sustain their parts in reading compositions in two, three, and four parts.

In the Latin school and English high school, forty-five minutes a week are given to the study of musical form and expression as found in choruses, quartettes, etc., from the standard operas and oratorios. Elementary harmony, counterpoint and composition have been introduced as elective studies for the second and first classes, and boys as well as girls having a special aptitude for music are the ones who naturally elect these studies, the only requisite being some knowledge of the pianoforte.

The students are instructed in scale formation, intervals, a logical and comparative view of all true chords, in order to give them the power to construct and resolve these chords for themselves.

The study of harmony is carried well into modulation, and of counterpoint through four simple orders or species, including both the major and minor modes.

Two periods each week are devoted to instruction, and occasionally the best compositions of the students are sung or played before the entire school ; in this way showing the practical side of the work which will prove an important factor in future teaching. It is hoped that as the importance of these studies becomes better recognized, they will be allowed to count in an entrance examination to college.

In the Rindge manual training school, a teacher of singing is employed a part of the time. He leads the singing at the morning exercises and gives regular instruction each day at that time.

It is expected that special instruction will be given to the student teachers of the Wellington training school, in accordance with the recommendation of the director of music.

Physical Training. The Ling system of physical training is used in all the grades of the primary and grammar schools. Games supplementary to the gymnastic work have been introduced throughout the

primary grades and the four lower grammar grades. These games are exercises in the form of play, and thus serve the double purpose of training and amusement.

The essential aim of the teaching is to make the gymnastic period one of healthful exercise and recreation.

Ten minutes are given each day to the work in the grammar grades, and fifteen minutes in the primary grades. The instruction is given daily by the regular teachers under the supervision of the director of physical training, who visits each schoolroom, except those of the eighth and ninth grades, as often as time will allow, and who also holds meetings with the teachers.

The following is from the report of the director to her supervising committee :—

During the two and a half years of my directorship, my aim has been to raise the standard of work in the minds of both teachers and pupils. Formerly a gymnastic lesson of ten minutes' duration divided the morning session into two nearly equal periods, while in the afternoon five minutes were given to games or marching. During the past summer the committee appointed to revise the time schedule reduced the gymnastic period in the grammar grades to ten minutes a day. Under the new schedule I am required to plan for two periods of five minutes each per day.

Educators, the world over, hold that physical training is a very important subject. It improves the body by calling into action the various groups of muscles, stimulates the circulatory and digestive system, and by its effect on nerve centers tends to make one alert, observing, accurate, prompt, self-controlled.

I ask that the present plan may be abandoned, and that we may be allowed not less than fifteen minutes each day for gymnastics.

There is need of a more thorough understanding of this subject by the teachers. New members are added to the corps each year. They come to us with a varying amount of knowledge of the subject of gymnastics. Under the present conditions, there is neither time nor place for instruction other than that given at the time of my regular visit to each schoolroom. With some of the new and many of the old teachers this is not sufficient to keep the work up to standard.

While the teachers will bear me out in making the statement that the quality of the work in gymnastics has improved during the past two years, they will also admit that there should be a broader knowledge of the subject on their part.

In anticipation of the opening of the gymnasium in the Latin school, it would be but natural to carry the work of supervision into the eighth

and ninth grades. This could be done most conveniently by adding one grade at a time for two successive years.

If the primary classes continue to take recess out-of-doors, they will need less supervision, and the time thus gained might be used to advantage in these two higher grades.

But it is quite important in planning for this step, to make provision for keeping up the interest by providing a small amount of apparatus. Why should the benefits of a gymnasium training be reserved for the few who attend the high school?

I urge the adoption of a plan something like the following: all the new buildings and some of the old ones have either spacious corridors, or unoccupied rooms in the basement. Let one or two pieces of apparatus be permanently placed in these available spaces, while certain pieces could belong to several buildings in the same district, and could be used part of the year by the classes in one building and then passed on to the next in the group. This would not be an expensive plan, but would provide a variety of apparatus.

All buildings erected in the future should have a large room on the ground floor set apart for gymnastics and games, and should have additional support sufficient to prevent jar to the whole building when higher grades are running, jumping, and vaulting.

Last spring the pupils of the primary grades were allowed the privilege of returning to the old-fashioned but refreshing outdoor recess. This was not made compulsory, but was left to the discretion of the principal. A few immediately embraced the opportunity with beneficial results. Not a few offered many and varied objections to the plan, and it was only after frequent solicitations that they were prevailed upon to break the routine of school work by a short period of freedom, fresh air, and sunshine. During the fall nearly all the primary classes were taking the recess out-of-doors at least once each day, and in a few instances twice a day. Many teachers testify to the freshness and renewed energy with which the children return to their work after this period of relaxation.

In the olden days schoolrooms were arranged to present a symmetrical appearance when viewed from the corridor. There are in Cambridge to-day many schoolrooms with desks so placed that light enters at the back and the right side of the room. This is wrong, and could be so easily corrected that this unhygienic condition should not be allowed to exist any longer.

During the spring and summer the rooms in several buildings were reseated with a view to improving the lighting. Much still remains to be done in this direction.

Sewing. Sewing is taught to the girls of the three lower grades in the grammar schools, and to the boys of the fourth grade who desire the instruction. Forty minutes are given to the work once a week in each grade. All the boys of the fourth grade are now learning to sew. The position of director of sewing has been established, and Miss Agnes Gordon, the senior teacher, has been elected to fill the place. The work now requires the services of two teachers besides that of the director. The director reports that the work is going on regularly and pleasantly.

Cooking. Cooking is taught in the English high school to the girls who elect the domestic science course. This course became one of the high school courses in September, 1899. Girls of the ninth grade of the grammar schools, who did not intend to go to the high school, have been permitted to take one lesson a week in cooking during the last half of the school year, arrangements having been made for afternoon lessons at the high school building.

School Libraries and the Public Libraries. The English high school has a library of about three thousand volumes. The Latin school has only about one-third of this number. Comparatively few books of a miscellaneous character have been added to these libraries for several years, the public library meeting the demand for such books. The need of the schools is for books of reference and for sets of books for class study.

The grammar schools, with the exception of the Morse and Webster, are not supplied with books for general reading. These are obtained from the public library, and during the year eight thousand nine hundred seventy-two books have been delivered to the schools, two hundred eighty-five of these being for the use of the vacation schools.

The question of bringing public libraries and public schools into close relation is one that deservedly receives the most thoughtful consideration in all educational circles. At the last meeting of the National Educational Association seven papers were read before the library department, and no one can read these papers without feeling that the public libraries and the public schools are one in their aim and purpose.

Mr. Metcalf, the president of this department, who is one of the supervisors of the schools of Boston, must have listened to these papers with great satisfaction, for he was one of the first to form a close connection between the public library and the public schools. In his opening address before the department, Mr. Metcalf spoke at length on the library movement—what it needs and what it should include. The following selections are from this address:—

"The best public library is that which most successfully leads its patrons to want only the best books, and from its own treasures satisfies

these wants most completely. The library is a public educator. The library and the school are co-ordinate institutions; neither is complete in itself, but each is necessary to the success of the other. * * * A good public library stands for what is highest and best in a community. An ideal librarian knows and loves books, and he will make any needed sacrifice to assist both young and old in selecting such courses in reading as are most likely to interest, instruct, and healthfully stimulate the reader. * * * The ordinary reading-books serve an excellent purpose by furnishing material for training pupils in the art of reading; but such material is too scrappy to lay a satisfactory foundation for reading good literature. The child must be led by orderly steps (1) to become a lover of good reading, and (2) to become a somewhat reflective and appreciative reader of the best books in our libraries. Such training will be successful only when the teacher himself is a lover of good books; a person whose whole nature responds to the author's thought, and whose intellectual training makes him appreciative of the beauty of the author's language in which his thought is clothed. * * * While calling upon the libraries for all the help which they are able to give both to the school and to the community, I would not forget the duty which the school owes to the library. Building up large public libraries, filling the shelves with the best and most costly books, employing skilful librarians and assistants to administer the affairs of the institution when completed—all these will fail to make the free public library a great public blessing, unless the schools do their share in preparing children for a wise use of the treasures which the libraries now so freely offer. Schools should be furnished generously with good books by the school authorities, and these books should be carefully read by the pupils under the direction of some accomplished instructor. A large saving of time is made when chapters, and even whole books, are read in class, freely commented upon by teacher and pupils, and beautiful passages pointed out, carefully studied, and committed to memory. Much of the reading, however, may be done by the pupils at home, leaving the "reading hours" in school for informal discussion, and for asking and answering questions by teacher and pupils. Children thus come to love good books, and to appreciate an author's art in the construction of his story. What better work can a teacher do for his pupils than to lead them on step by step in their daily reading, until they become lovers of good reading, and then step by step still forward, until a taste for what is best in literature is surely gained, and becomes the guiding star in all future reading?"

From the other six papers only brief selections are taken. The following seem especially appropriate in this connection: —

"The directors of public schools and the directors of public libraries should be in close touch with each other. * * * The teachers in the

public schools, and the officers and other workers in public libraries, should confer frequently concerning their common work. * * * School authorities and teachers should give especial attention to the library work of children, and should endeavor to interest them in the public library as an institution which can minister very effectively to their later growth and enjoyment. * * * Teachers should urge those children who must drop out of school to continue reading on different lines, the teacher herself continuing personal and helpful relations as long as possible. * * * The public library, like the public school, has come to believe that the hope of the future lies in the education of the child. The modern progressive public library has dedicated a room to the children. Nor is it a room in some dark basement corner, but a large, bright room, with plenty of light and air, attractive pictures on the walls, low bookshelves filled with carefully selected and beautifully illustrated books, and an attendant specially trained for work with the children. * * * No one outside of the home ever enters as intimately into the life of the child as does the teacher. The child is compelled to go to school a certain number of hours a day for a given number of years. He goes to the library when he chooses. Therefore we look to the teacher to inspire in him a taste for good reading, and to train him in an economical use of books. It is the librarian's duty and privilege to prepare the material for the teacher's use, and to be ready to take up the work with the child when he leaves the school for the day, the vacation, or for all time. * * * One relation of the library to the school is in its helping to lift the school work by means of good literature and art into the higher region of the æsthetic and the spiritual. When Horace Mann entered so enthusiastically, sixty years ago, into the establishment of district-school libraries, his argument was that the schools might thus be enabled to make, not only the minister, the doctor, the lawyer, the artisan, but the *man*, with all his higher powers cultivated, and not merely his ability to do certain work. * * * If the interests of children at different periods are consulted and the right literature is at hand, the problem of making children love good literature is largely solved. But the presentation needs a word of suggestion. Man's power to get images from printed characters is a late acquisition. The human voice is a much older means of firing the imagination. Undoubtedly children may be best introduced to good literature by the story-teller or the good reader. There should be more reading aloud in home and library and school. * * * No child in an environment of those who love good literature, if allowed to come to the table, will fail to acquire the taste. Probably the teacher should sing and should draw, but before we legislate in this respect, let us see that no teacher who knows not literature, and loves it not, is appointed to the charge of children of any age. A knowledge of children's interests and a love of literature in the teacher, and

our problem is easily solved. * * * The library is to be recognized, not as something desirable, but as an absolutely necessary complement to the schools in any satisfactory educational system. * * * Not only must the library be so used as to assist in the education of the child, but the school in its turn must recognize its duty to equip the child for the future enjoyment of the library. Two worlds offer their riches to every youth who steps out from the threshold of the school — a world of affairs and a world of books. Happy he who is well prepared to participate in both!"

Evening Schools. The following account of the evening schools is given by Mr. Hubbard, the agent of the school committee, who has the general supervision of these schools:—

There are seven evening schools—two drawing schools, one high school, and four elementary schools. In accordance with the rules of the school board, there are two terms of the evening schools. The first term begins on the second Monday of October, and continues every Monday, Wednesday, and Friday evening until the end of the week before Christmas. The second term begins on the first Monday, Wednesday, or Friday evening after the opening of the day schools in January, and continues thirty-five evenings. The sessions begin at half past seven and continue two hours. No session is held on the evening of a holiday, or during the vacations of the day schools.

The evening drawing schools are under the supervision of the director of drawing for the day schools. There are two of these schools, one for instruction in mechanical drawing, which occupies four rooms in the Central square building, and one for instruction in free-hand drawing, which occupies the drawing room in the English high schoolhouse. In the mechanical school two courses are provided,—a three years' course in machine drawing, and a three years' course in architectural drawing. In the free-hand school provision is made for a three years' course in free-hand drawing. Diplomas are given to graduates of either course.

The evening high school is held in the English high school building, and offers a three years' course of instruction in the following subjects: arithmetic, bookkeeping, penmanship, English composition, English literature, civics, history, algebra, geometry, stenography, Latin, French, and German. Diplomas are granted to graduates of the three years' course.

The elementary evening schools occupy rooms in four of the grammar school buildings, the Allston, Putnam, Shepard, and Webster. Reading, writing, arithmetic, geography, language, history, and bookkeeping are taught in these schools in classes, so far as classification is possible, but a large part of the work is individual. No definite course is arranged, but an opportunity is offered to pupils to prepare to enter the evening high school, and certificates of admission are given to those who are quali-

fied to begin the work in that school. In addition to the subjects given above, classes in civil service, sewing, wood working, and mechanical drawing are formed when a sufficient number express an intention to take any one of these courses.

The following table shows the attendance of the evening schools for 1900–1901, compared with that of the preceding year : —

Schools	Number Registered	Average Attendance	Average Number of Assistants *	Average No. of Pupils to a Teacher *	Number of Graduates
Mechanical Drawing..	121	65	4	16	9
1899–1900.....	108	61	4	15	8
Free-hand Drawing...	72	32	2	16	5
1899–1900.....	76	38	2	19	7
Evening High.....	365	165	8	20	8
1899–1900.....	369	150	8	19	17
Allston School.....	376	127	15	8	32
1899–1900.....	304	106	16	7	16
Putnam School.....	244	73	9	8	11
1899–1900.....	231	72	9	8	12
Shepard School.....	153	45	6	7	8
1899–1900.....	174	32	6	5	4
Webster School.....	148	54	6	9	11
1899–1900.....	170	60	7	8	9
Total.....	1,479	561	50	11	84
1899–1900.....	1,432	519	52	10	73

* The principals and curators are not included in these averages.

The following table shows the cost of the evening schools for 1900–1901, compared with that of the preceding year : —

Schools	Cost of Instruction	Cost of Text-books and Supplies	Cost of Light, Fuel, and Janitor	Total Cost	Cost per Pupil
Mechanical Drawing..	$802 00	$53 76	$314 92	$1,170 68	$18 01
1899–1900.....	947 00	55 36	208 62	1,210 98	19 85
Free-hand Drawing...	403 00	34 08	108 04	545 12	17 04
1899–1900.....	483 00	13 40	67 90	564 30	14 85
High School.....	1,551 75	50 79	972 36	2,574 90	15 61
1899–1900.....	1,874 00	113 14	611 08	2,598 22	17 32
Allston School.....	1,182 00	101 18	381 67	1,664 85	13 12
1899–1900.....	1,362 50	69 40	221 30	1,653 20	15 60
Putnam School.....	603 50	55 97	376 01	1,035 48	14 18
1899–1900.....	797 50	18 60	212 78	1,028 88	14 29
Shepard School.....	510 00	35 75	207 46	753 21	16 73
1899–1900.....	556 50	27 47	156 05	740 02	23 13
Webster School.....	482 00	14 26	258 22	754 48	13 97
1899–1900.....	658 50	20 34	206 95	885 79	14 76
Total.....	$5,534 25	$345 79	$2,618 68	$8,498 72	$15 14
1899–1900.....	6,679 00	317 71	1,684 68	8,681 39	16 73

The following is from the report of the committee on evening schools: —

The foregoing tables show that, except in the free-hand drawing school and in the Webster school, the number of pupils is larger, and, except in the free-hand drawing school, the expense per pupil less than during the previous year, notwithstanding the increased salary paid to several of the teachers for special work during the last term of the year. The reduction would have been larger but for the increase in the expenses for lighting, which was greater than during the preceding year by $891.75, caused by the payment this year of many bills for lighting which should have been paid during the previous year. The reduction in the amount paid for salaries of teachers is $1,144.75, or $2.04 per pupil on the average attendance. This reduction has been accomplished by a better classification of the pupils, so that a teacher has been able to instruct a larger number than was possible by the method of individual work.

By the class method there is an immense gain in efficiency as well as in economy, for all members of the class are giving and receiving attention constantly, and are learning from one another as well as from the teacher.

Class work is necessary in wood working, drawing, sewing, and preparation for civil service examinations. These subjects were introduced in the Allston school at the beginning of the second term; and class work has been extended to other classes, notwithstanding the protests of many teachers that it was impracticable.

The class in civil service contained fourteen members, and though it was not organized until the beginning of the second term in January, two members passed examinations for railway mail service with credit. Seven members of this class received certificates of admission to the evening high school, but several of these returned to the Allston school this fall to continue the civil service work.

There were seventeen in the class in sewing, all girls working at various occupations. Their attendance was regular, and their enthusiasm for the work was marked. A majority of them have joined the class this term. They made sewing bags, needlebooks, pinballs, and other small articles, furnishing most of the materials on which they worked, and learning a variety of stitches, useful and ornamental. Those who have returned this term are cutting and making shirt waists and skirts, under the direction of the teacher whose efficiency and enthusiam have contributed so much to the success of the experiment. They devoted one hour each evening to sewing and the other to the study of Ivanhoe; this term bookkeeping takes the place of Ivanhoe.

There were forty-one, from fourteen to eighteen years of age, in the

wood working and drawing classes, working in two divisions on these subjects on alternate evenings. Ten pupils of these classes received certificates of admission to the mechanical drawing school. Fifteen members of the class fitting for the evening high school received certificates of admission to that school. The committee was fortunate in the selection of teachers for these experimental classes.

The attendance and work at the evening high school was about as usual, though some of the classes were badly broken by the illness of teachers which compelled a change during the term, always a serious injury to evening school work. Diplomas were given to eight pupils of this school at the end of the year in March.

In the mechanical drawing school, the usual course of study was completed with the addition of some free-hand work, sketching, and lettering, made possible by the lengthening of the term. Nine pupils received diplomas, — four in the machine course and five in the architectural course. In the free-hand drawing school, five pupils received diplomas at the end of the last term.

The total number registered in all the schools in 1900-1901 was one thousand four hundred seventy-nine, an increase of forty-seven over the preceding year. The average attendance for the year was five hundred sixty-one, an increase of forty-two for sixty-five evenings.

The whole number registered during the present term, to December 1, 1901, was one thousand five hundred seventy, an increase of one hundred twenty-one over the number registered last year. The average attendance to this date was eight hundred ninety-one, an increase of one hundred fifty-three over last year.

The fire at the Allston schoolhouse, on December 12, interrupted a very successful evening school. At the end of the Christmas vacation, however, provision was made for lighting the Roberts schoolhouse, and the classes resumed work in that building.

It is recommended that in future a still more careful classification of pupils be made, and that only teachers be employed who are experienced in class work; that a course of study for the evening schools be prepared, so that pupils and teachers may know what is expected of them and may have in view an object to be attained, this being a strong incentive to effort in any work; that next year the Rindge manual training school be opened for evening work to those young men in our factories and workshops whose success in their daily occupations will be facilitated by instruction by and practice under skilled teachers in wood working, pattern making, blacksmithing, and machine-shop work, these courses to be offered to those only who are engaged in work akin to these, and who will be made more successful by instruction in these subjects; that the com-

mittee on evening schools for 1902 be requested to consider the salaries of teachers in the evening schools, and report for the consideration of the Board a scale of salaries for all these schools which shall be equitable to all and shall secure the best possible service.

The support of evening schools is required by public statutes and the problem for the Board is so to conduct them that the community shall receive the largest possible benefit for the money expended.

Truant Officers. Four officers are employed. The city is divided into four districts, and each officer has assigned to him the schools in one district. Among their duties are the following: to visit each school at least once a day, unless otherwise directed by the agent; to prevent children from loitering about the school premises; to notify the teachers of all cases of contagious and infectious diseases reported by the board of health; to attend the evening schools when so directed by the agent of the Board to assist in the preservation of order, and to visit places of business where children are employed to see that none are employed unlawfully. They make all complaints for truancy, absenteeism, or school offences at the district court, attend the trials as witnesses, and take boys to the Middlesex county truant school when they are sentenced.

By the rules of the school board the work of the truant officers is done under the supervision of the committee on schoolhouses; and under the direction of this committee, it is the duty of the agent of the Board to consider all cases of truancy, of persistent violation of the rules of the school, of juvenile vagrancy, of unlawful detention from school, of neglect by parents; and of any failure on the part of pupils or parents to comply with the rules of the school committee or the public statutes relating to school attendance. It is also the duty of the agent to direct the officers to make complaints; to certify the records in these cases when presented before the district court; and to exercise such supervision of the boys who are sent by the court from Cambridge to the truant school as may be allowed under the statutes.

The following is from the report of the committee in charge of the work of the truant officers: —

	1900.	1901.
Whole number of absences investigated	16,189	14,862
Truancy, first offence	583	609
" third "	131	78
" fifth "	151	85
Complaints at court	37	24
Children put on probation	9	8
Sentenced by the court	27	18
Visits to mercantile establishments	191	222

On December 1, 1900, there were thirty-five Cambridge boys in the Middlesex county truant school; sixteen have been discharged, one has

died, and eighteen have been sentenced, so that we now have thirty-six at the school. These have cost the city of Cambridge for transportation to and board at the school $1,818.69, or an average of $51.96 per pupil, about $30.00 more than the expense per pupil in our grammar schools.

During the year a card system has been in use for keeping a record of the pupils whose absence and tardiness is reported to the agent by the teachers in accordance with Section 77 of the rules, and also of the nature of the delinquencies and of the action of the agent on the cases so reported.

The first notice has been sent to five hundred fifteen parents or guardians; the second notice to eighty; and a third notice to eight. Forty-four parents have been summoned to the office because of non-attendance of their children. Twenty-four complaints have been made: of truants, nineteen; of absentees, three; and of incorrigibles, two. Two complaints have been made against parents for neglecting to cause their children to attend school. Eighteen boys were sentenced to the truant school; one to the Lyman school on other charges than truancy; two were sent out of the State by parents; and three are on probation. The child of one parent complained of was sent to the truant school, and the case of the other is continued to December 31. The per cent of attendance in the public schools for the school year 1900-1901 is ninety-two and one-tenth per cent, an increase of three-tenths of one per cent.

Twenty-six letters were sent to parents whose children attend parochial schools, and two of the boys sentenced were from these schools.

The school census was taken this year by the truant officers, assisted by five men who were employed in canvassing ninety-one and one-half days. The cost of canvassing and recording the census was $279.25, besides the services of the truant officers and what the clerks in the office of the committee could do in recording. We still think that the value of the statistics obtained is not equal to the cost. The following is the summary of the school census for 1901: —

Number of children in the city between five and fifteen, boys, 7,560; girls, 7,740	15,300
Number in public schools between five and fifteen	12,189
Number in private schools between five and fifteen	2,607
Number not attending school between five and seven	249
Number not attending school between seven and fourteen	78
Number not attending school between fourteen and fifteen	177
Whole number not attending school between five and fifteen	504
Number in the city between five and six	1,646
Number in the city between seven and fourteen, boys, 5,245; girls, 5,439	10,684

On our petition last year, the time for taking the census was extended to November 15, by the legislature. We were not able, however, to

secure a repeal of the law requiring the taking of the census, though this was advocated by the school authorities of other cities and towns besides those of Cambridge.

It appears by the statistics of private schools, obtained by one of the truant officers, that there are twelve private schools in Cambridge, which contain three hundred eighty-nine pupils and receive $47,500 for tuition, and four parochial schools having three thousand fifty pupils; making three thousand four hundred thirty-nine pupils attending other than the public schools. This is an increase of four hundred thirty-five pupils above the number attending these schools last year. One hundred sixty are in the school on Concord avenue which was opened last fall. One of the greatest difficulties in enforcing the laws requiring school attendance is the laxity in the requirements of these schools, which allow many boys of school age to be on the street neglecting their own privileges and influencing others to stay from school. A more hearty co-operation of the heads of these schools with the agent would prevent much truancy and the necessity for sending some boys to the truant school.

The work of all the truant officers has been satisfactory in spirit and results. It is with deep regret that we record the death of Jeremiah Murphy, who was appointed truant officer June 1, 1899, and died March 31, 1901. He was an excellent officer, conscientious and faithful in all his duties; he performed them in a spirit which won the confidence and esteem of parents and children, as well as of his associates. Thomas F. Riley was appointed in his place April 18, 1901, and is doing excellent work.

Janitors. Section 31 of the city charter provides that "The mayor shall appoint the janitors of schoolhouses, subject to confirmation by the school committee, and may remove them at pleasure for cause assigned; and such janitors shall perform their duties under the direction of the school committee."

Under the direction of the committee on schoolhouses, the agent supervises and directs the work of the janitors, and reports to the committee such matters as seem to need their consideration. The principals of the schools report each month whether or not the work is done in a satisfactory manner.

The heating of the schoolhouses is under the charge of a person appointed for especial fitness for this work, Mr. Edward B. Dale, who has rendered valuable service during the past five years.

The agent reports that except in a few instances the work of the janitors has been done satisfactorily and in a spirit of pride in doing their work well.

Contagious Diseases. In 1894 the board of health, in accordance with the request of the school committee, appointed a physician, whose duty it is to examine all cases of contagious diseases reported, and to direct the exclusion from the schools of all pupils whose presence will, in his opinion, be a menace to the health of others. He reports his action on every case to the secretary of the school committee. The physician issues all certificates authorizing such children to return to school, as provided by Chapter 496, Section II., Acts of 1898.

As a further precaution against contagious diseases, the board of health established, February 26, 1896, a system of medical inspection of children in the schools. The city was divided into six districts, in each of which a physician was appointed to visit the schools in that district. The duties of these physicians as now defined are as follows: to visit the schools subject to their inspection during the morning session of every school day; to examine such children as are indicated to them by the teacher as having complained, or as appearing to be suffering from disease; to inspect such other children or such parts of the building as they deem necessary for the protection of the pupils, examining at least one school each day; to recommend to the principals to send home immediately any pupil whom they may suspect of having any infectious or contagious disease, and also, in cases of nearsightedness or deafness of pupils, to advise the parents to have the eyes or ears of such pupils examined. On the first of each month, the physicians send a report of their work to the board of health.

Once each term it is the duty of the principal of each school to call the attention of the pupils to the following rule: —

No pupil who has visited any apartment in which a person is, or within two weeks has been, sick with smallpox, varioloid, diphtheria, or scarlet fever, shall be allowed to attend school until the expiration of two weeks after such visit.

The agent of the school committee reports that during the year December 1, 1900, to December 1, 1901, the following cases of contagious diseases have been reported by the board of health to the office of the agent, and by the truant officers to the schools: —

Diphtheria, six hundred eighty-five, a decrease of two hundred thirty-nine; membranous croup, fourteen, a decrease of eleven; scarlet fever, ninety-eight, a decrease of eighty-nine; smallpox, five, an increase of five; measles, five hundred thirty-nine, an increase of three hundred ninety-five.

Teachers, Resignations, Appointments. There are now four hundred thirteen teachers in the schools. Thirty-two of this number have been appointed during the year. Eighteen teachers have resigned; one has

died; four have been given leave of absence for rest or for some special reason; and two are absent for study and travel, under the following rule of the school committee: — "Any teacher who has served in the city for ten years, may, on recommendation of the superintendent and vote of the Board, have leave of absence for one year for purposes of study or travel, and may receive one-third of his salary, provided the amount in no case shall exceed five hundred dollars."

Since the adoption in 1896 of this rule, eleven teachers have had leave of absence for a year for purposes of study or travel,—five from the high schools, four from the grammar schools, and two from the primary schools.

Among those who have resigned during the year are four teachers who have served the city for periods varying from twenty-seven to thirty-nine years. Mrs. Abby S. Taylor was appointed a teacher in the Otis primary school September, 1863, having previously taught one year in the same school. She was transferred to the Thorndike grammar school in 1877. Miss Amelia Wright and Miss Laura Wright were teachers in the Willard school. Miss Amelia Wright was appointed April, 1871, and in 1878 was made principal of the school. Miss Laura Wright was appointed May, 1874. These teachers were devoted to their work, and rendered the city most faithful and conscientious service. The fourth teacher was Mr. James S. Barrell. A somewhat extended account of his work will be given later in this report.

In October, Miss Helen E. Andrews, a teacher in the English high school, after an illness of several months, died at her home in Malden. She was a graduate of Boston University, and had taught for several years before she came to Cambridge. She was characterized by faithfulness and skill in her work, and by a cheery spirit among her pupils and her fellow teachers.

A person to be eligible to the position of teacher in a kindergarten must have had a course in a high school, a course in a kindergarten normal school, and must be able to play the piano; to be eligible to a position in a primary or grammar school, he must have had a course in a high school, a course in a normal school, and a year's experience in teaching; to be eligible to a position in a high school, except in the manual training department of the manual training school, he must be a college graduate. Equivalent preparation may be accepted.

When a teacher has been nominated for a position in a kindergarten or primary school, or for a position below that of principal or master in a grammar school or high school, two persons of experience among the teachers who are not connected with the school in which the nominee is to serve, are deputed by the superintendent to visit the teacher nominated

and to examine him at work. Each person so deputed reports in writing to the superintendent; and these reports are kept on file by him, and are open to inspection by members of the Board only. For a nomination to a position in a high school, the superintendent, with the consent of the committee on high schools, may dispense with such examination, or may depute as examiners teachers connected with the school in which the nominee is to serve or persons not in the service of the city.

The committee on teachers considers all nominations made by the superintendent. They confer with the superintendent, consider the reports of the examiners deputed by him, make further inquiry at discretion, and report to the Board for final action.

Any nomination referred to the committee on teachers elapses at the expiration of four months, not counting the summer vacation. A person who has failed of confirmation is not to be nominated to a similar position within two years, except on the approval of this committee.

This committee inquires and reports to the Board in executive session, as to the success of any teacher in the employment of the city, when so requested by any member of the Board or by the superintendent; and no teacher whose success is under inquiry receives the regular increase of salary, except on the recommendation of this committee.

Experience in teaching, whether in or out of the city, may be considered in fixing the salaries of teachers.

Under the direction of the superintendent, teachers may visit other schools to observe the discipline and instruction. They may be required to attend teachers' meetings or courses of instruction in methods of teaching for one hour a week. Such meetings may be held on Saturday mornings during term time or at such other time, not in school hours, as the superintendent may direct. Meetings in addition to those indicated above may be held by the superintendent or may be called by him, on request of directors in special subjects.

SALARIES OF TEACHERS AND SCHOOL OFFICERS.

Latin School and English High School.

Head Masters	$3,000 00
Masters	2,000 00
Master's Assistants	1,200 00
Teachers, first year	700 00
with an annual increase of $50 until $950, the maximum, is reached.	
Assistant Teachers, first year	500 00
" " second year and each succeeding year	600 00

Rindge Manual Training School.

Head Master	$3,000 00
Masters' Assistant	1,300 00
Teachers, academic side, first year	700 00
with an annual increase of $50 until $1,000, the maximum, is reached.	
Teachers, manual training side, salaries range from $800 to $1,500.	

Wellington Training School.

Master	$2,500 00
Supervising Teachers (three) first year	900 00
" " second year and each succeeding year	1,000 00
Master's Assistant, first year	800 00
" " second year and each succeeding year	900 00
Teachers of the eighth grade	700 00
Teachers of the seventh grade (one year's experience)	450 00
Teachers of the other grades	250 00

Grammar and Primary Schools and Kindergartens.

Masters of grammar schools	$2,000 00
Sub-masters, first year	1,000 00
with an annual increase of $100 until $1,400, the maximum, is reached.	
Masters' Assistants, first year	800 00
" " second year and each succeeding year	900 00
Teachers of the ninth grade, first year	750 00
" " " " second year and each succeeding year	800 00
Special Teachers in grammar schools, first year	700 00
" " " " " second year and each succeeding year	750 00
Principals of primary schools, first year	700 00
" " " " second year and each succeeding year	750 00
with five dollars additional for each room under her supervision.	
Teachers of grammar and primary schools, and principals of kindergartens, first year	450 00
with an annual increase of $50 until $700 is reached.	

SUBSTITUTES.

The pay of a substitute teacher in a high school, who is employed temporarily, is $2.50 a day; if employed one month or more, it is at the rate of $500, $600 or $700 a year, the sum to be determined by the superintendent, who shall consider the experience of the teacher and the position to be filled, in fixing the sum.

The pay of a teacher who is employed temporarily as a substitute in a grammar school, a primary school, or a kindergarten, is $1.00 a session; if employed one month or more, it is at the rate of $450 a year.

Special Teachers and Officers.

Director of Music	$2,000 00
Director of Drawing	1,900 00
Assistant Teacher in Drawing	800 00
Director of Nature Study (three-fifths time)	1,000 00
Director of Physical Training	900 00
Director of Sewing	700 00
Teachers of Sewing	600 00
Superintendent of Schools	3,500 00
Supervisor of Primary Schools	1,200 00
Agent of the Board	2,100 00
Truant Officers (four are employed)	1,000 00
Secretary of the School Committee	400 00
Page of the School Committee	25 00
Secretary and Librarian of the Latin School	600 00
Secretary and Librarian of the English High School	600 00
Secretary and Librarian of the Rindge Manual Training School	500 00

The following rules apply to special cases: —

Upon the recommendation of the superintendent and the committee on teachers, the salary of a teacher in a grammar or primary school, or of the principal of a kindergarten, may be increased from $700 to $750, provided such teacher has served at least one year. The number of teachers whose salaries may thus be increased is not to exceed one-third of the whole number of teachers in these grades.

Assistant teachers, that is, teachers not in charge of a room, are paid $450 the first year, $500 the second, and $550 the third and each succeeding year; and, in the case of assistants in the kindergartens, $600 for the fourth and each succeeding year.

Terms, Holidays, and School Hours. The school year is divided into three terms:—

The time for beginning the autumn and spring terms, and for closing the winter and spring terms, is fixed annually at the regular meeting of the committee in February. The autumn term ends December 23. The winter term begins January 2 (or the day after that celebrated as New Year's Day).

The holidays are Saturdays; Thanksgiving day, with the preceding day and the day following; the twenty-second of February; the nineteenth of April; Memorial day; the seventeenth of June; and in addition to these, for the high schools, Commencement day at Harvard University.

The sessions of the high schools begin at 8.30 A. M., and end at 1.30 P. M. The sessions of the Rindge manual training school begin at 8.30 A. M., and end at 2 P. M. These schools have a recess of half an hour in each session.

With the exception of the Russell school, the morning sessions of the grammar and primary schools begin at 9 and end at 11.45. The afternoon sessions begin at 2 and end at 4, except during the months of November, December, and January, when they begin at 1.30 and end at 3.30. The grammar schools have no outdoor recess. In the primary schools the principal may, at her discretion, substitute an outdoor recess for the period at present devoted to physical training. The sessions at the Russell school begin at 8.30 A. M., and end at 1.30 P. M.

The sessions of the kindergartens are from 9 A. M. to 11.50 A. M

VACATION SCHOOLS.

In 1899 by an act of the legislature the school committee of any city or town was authorized to establish and maintain vacation schools. Soon after the passage of the act the following petition was received by the school committee: —"In view of the demand for vacation schools in Cambridge by both parents and children, and of their excellent results in preventing habits of idleness and lawlessness, and of developing those of industry and self-reliance, we, citizens of Cambridge, respectfully petition the school committee to assume the charge and maintenance of the vacation schools, which have been carried on during the past four summers by and at the expense of private citizens." This petition signed by more than fifty citizens of Cambridge was referred to a special committee. At the meeting of the Board in December, that committee recommended the establishment of vacation schools, and that the city council be requested to make an appropriation of $2,000 for their maintenance. The request was granted and vacation schools were carried on for six weeks during the summer vacation. These schools were so successful as to leave no doubt as to the desirability of continuing them another year. The committee, therefore, included in its estimate for the maintenance of the schools for 1901, the sum of $2,000 to be expended for vacation schools. The city council made the appropriation, and vacation schools again became a part of the school system.

Last year sloyd and drawing were taught in only two schools, cooking and dressmaking in only one, making it necessary for many pupils taking these subjects to travel a long distance. In planning for the schools this year, it was decided that instruction in these subjects should be given in a larger number of schools, and that the schools should be located in different parts of the city. Seven schools were opened. Sloyd was taught in five, drawing in four, and dressmaking in four. No additional provision was made for instruction in cooking.

To avoid difficulties that occurred in organizing the schools last year, no child was enrolled until the parent or guardian had given assurance that the attendance should be punctual and regular. This was found necessary because last year a large number of children expressed the wish to attend these schools, but after provision had been made for them, and when it was too late to arrange for others to take their places, changed their minds and did not attend.

The schools began on Monday, the eighth of July, and were in session five days a week for six weeks. The pupils were taught in two divisions, each division receiving two hours' instruction each day. The first division met in the morning at half past eight, and the second at fifteen minutes of eleven. Boys of the sixth, seventh, and eighth grades had sloyd as a part of their work, and the girls sloyd, cooking, or dressmaking. The pupils of the fourth and fifth grades had lessons in reading, drawing, and other studies of an interesting and practical character.

The schools were divided into two groups, and each group was under the charge of one person whose duties were those usually performed by the principal of a school. Mr. Frederick B. Scotton had charge of one group, and Mr. W. Franklin Smith of the other. The whole number of teachers, not including the above mentioned, was nineteen; the average number of pupils, six hundred ninety-four; the cost of the schools, $1,885.48, making the cost per pupil $2.72.

The following table shows the location, classification, and attendance of the several schools: —

Schools	Studies	Number Registered	Average Attendance
Rindge Manual Training School	Sloyd and Drawing ...	106	70.0
English High School.....	Sloyd and Drawing ...	107	68.4
English High School.....	Dressmaking	75	59.4
English High School.....	Cooking	64	46.6
Allston School.....	Sloyd and Academic ..	117	65.0
Putnam School.....	Sloyd and Drawing ...	86	73.8
Putnam School.....	Dressmaking.....	41	22.0
Putnam School	Academic	132	80.6
Shepard School.....	Sloyd and Drawing ...	50	33.6
Shepard School.....	Dressmaking	27	16.7
Shepard School.....	Academic.....	87	55.2
Washington School	Academic.....	64	42.0
Webster School.....	Dressmaking.....	45	19.7
Webster School.....	Academic.....	58	41.0
Total.....	.....	1,059	694.0

No description need be given of the work in sloyd, drawing, cooking, or dressmaking. The names indicate the lines of work.

Under the name of academic studies, however, a great variety of exercises might be included. These studies are the ones that occupy the attention of the pupils for the larger part of each day during the school year. How to continue these studies and not have pupils grow weary of them was and is a difficult question.

Vacation schools are not established primarily for the purpose of giving more extended opportunities for an education, but rather to provide

ways by which children who remain in the city during the long summer vacation shall find something to do that will interest them and at the same time profit them. With this end in view, the plan of work for the academic classes included many exercises which made it necessary for the pupils to visit different parts of the city and get information from various sources. The following questions and directions prepared by the teachers and the superintendent include some of the lines of work :—

1. How wide are the streets in the vicinity of the schoolhouse? How wide are the sidewalks? What are the dimensions of a brick? How many bricks will it take to lay a new sidewalk in front of the schoolhouse?

2. Write the inscriptions you have recently read on historic tablets in Cambridge.

3. Make a list of the different kinds of animals you have seen; of birds; of trees; of flowers.

4. Make a list of the different articles, with the price of each, which can be bought at a hardware store. At a provision store. At a dry goods store. At a grocery store. At a drug store. At a furniture store. At a fish market. At a bakery.

5. What is the market price of the following articles: — Coal by the ton, hard wood by the cord, potatoes by the bushel, rump steak by the pound, kerosene oil by the gallon?

6. Draw a plan showing the direction of the streets in the vicinity of the schoolhouse, and indicate the location of the schoolhouse and other prominent buildings, giving the names of the streets and the buildings.

7. What towns and cities touch Cambridge or are separated from it by Charles river?

8. Write in full the names of ten prominent men who live in Cambridge, giving the street on which each lives, and the number of his house.

9. What places in Cambridge would be likely to interest a friend visiting you for the first time? What places in Boston? In Massachusetts?

10. Write the names of ten cities in Massachusetts, with the distance of each from Cambridge.

11. In what different ways do people get from one place to another? In what different ways is information conveyed?

12. Have each pupil write his name and the name of the street on which he lives on a slip of paper. Let these slips be passed from pupil to pupil, and have each pupil copy all the names on a half sheet of paper, writing on the first line the name of the school, and on the second the name of the teacher and his own name.

13. Make a list of words, each beginning with a vowel; with a consonant; a list of words containing double letters, as *cc*, or *nn*, or *pp*, or *ss*, or *tt*.

14. Make a sentence containing two words requiring the use of capitals; containing three words requiring the use of capitals; four; five.

15. Make a list of ten words containing one syllable; two syllables; three syllables; four syllables. Use ten of these forty words in writing a few lines on any subject.

16. Make a list of words accented on the first syllable; on the second; on the third.

17. Write the names of the days of the week and months of the year, putting after each its abbreviation.

18. What are the dimensions of the schoolroom? Cost of boards for a new floor, no allowance for waste? How many square feet of blackboard in the room? How many square yards of plastering in the walls above the blackboards? How many in the ceiling? How many windows and doors in the room? Number of panes of glass in each window? Size of glass? Probable cost of each article of furniture? Describe the pictures in the room.

19. Find the sum of the numbers from 1 to 100 which are divisible by 3; by 4; by 5; by 6; by 7; by 8; by 9.

20. Find the sum of the numbers from 100 to 200 which are divisible by 6; by 7; by 8; by 9.

21. Make a list of articles usually found in a furnished house.

22. Make a list of articles made of iron; of steel; of copper; of tin; of glass; of wood; of silver; of gold.

23. Make a list of articles usually sold by the yard; by the pound; by the quart or gallon; by the peck or bushel.

24. Each morning let the teacher write on the blackboard ten common words that are frequently misspelled. Have the pupils also write on the blackboard the same ten words, each pupil adding to the list one word on which many often fail.

25. Once a week let each pupil write something about the book he is reading.

26. Twice a week let each pupil recite a few lines committed to memory since the opening of the school, and then write the same on paper.

27. *The Pupils' Reader.* Let each pupil select from the reading book supplied to the school, or from any other source, ten or fifteen lines which to him are especially interesting. Let him copy these on one side of a half sheet of paper under an appropriate title, giving the author's name and his own name. Preserve these selections to be used for a reading lesson from time to time.

28. *The Teachers' Reader.* For the purpose of awakening an interest in good books, let the teacher read from day to day from some book of real merit. Ten or fifteen minutes each day can be spent profitably in this way.

29. *Museum Day.* Invite the pupils to bring from their homes with the permission of their parents any articles of special interest, the articles to be taken home at the close of the session, that there be no risk of loss.

30. *Book Day.* Invite the pupils to bring the books which they are reading, and during the session have each pupil write the title of his book with the author's name, and four or five lines which he may select from the book.

31. *Picture Day.* Invite the pupils to bring pictures. These may be of two kinds, those to be shown only for the day, brought from their homes with the permission of their parents, and those collected from magazines to be retained and used as the basis of language lessons.

32. *Visiting Day.* Arrange to hold one session of each class at the Public Library, and one at the Agassiz Museum.

FIFTY YEARS A TEACHER.

In May, Mr. James S. Barrell, master of the Harvard school, sent the following communication to the school committee : —

"To the School Committee of Cambridge :—

If my life be spared until the end of this term I shall have taught for fifty consecutive years — more than half of which have been spent in the schools of Cambridge. I can but feel that this year, which closes a half century in my chosen profession, is the fitting time for me to lay aside its active duties and responsibilities. I therefore respectfully inform you that I shall not be a candidate for re-election. It is impossible for me adequately to express the feelings which arise at the severing of ties which have bound me so long and so closely to the school life of this city. From the day when the school committee invited me to teach in Cambridge to the present meeting of your Board, I have known only happy relations with those connected with the school administration. In 1874 your predecessors placed in my keeping the trust which I shall relinquish at the close of this school year; and I wish to express to your Board my appreciation of the many marks of your confidence and consideration. To our honored superintendent, whose wise counsel and direction have been invaluable, I acknowledge my great indebtedness. For the loyalty and helpfulness of the teachers who have been associated with me during these years I shall ever cherish the most profound gratitude; nor can I forget the aid which has been received in the co-operation of the parents of those committed to my care. For my former pupils, who contributed so much to my happiness, and for those whose faces are now a daily inspiration, I shall retain an abiding affection.

With unfailing interest in the welfare of the Harvard school, and in all that relates to the education of the children of this city, I am,

Respectfully yours,

James S. Barrell.

Cambridge, May 16, 1901."

This communication was referred to the committee of the ward in which the Harvard school is located, and at a subsequent meeting of the Board the following resolutions were offered and unanimously adopted : —

"Whereas, After fifty years of continuous and successful service as an instructor in public schools, twenty-seven of which have been spent in Cambridge, Mr. James S. Barrell has felt it necessary to relinquish his active duties, and has resigned from the corps of instructors in this city, and

Whereas, The school board of Cambridge, feeling his service to be a valuable one, and worthy of marked attention,

Resolved, That we recognize in Mr. Barrell, not only a successful teacher, but a man of sterling integrity, high character, conscientious and painstaking in the discharge of his duties, and ready 'in season and out of season' to work for the best interests of those under his charge.

Resolved, That we testify with great pleasure to the successful prosecution of his work, which has never failed to be eminently satisfactory to the school authorities. We have noted, with pride, his success in keeping his schools up to a high standard, and the hearty and enthusiastic support with which his efficient and able corps of teachers have been ready to second and aid him in his efforts. His fine sense of justice, his marked manly gentleness, won the esteem, obedience and love of his scholars.

Resolved, That we sever our official relations with him with deep regret, and wish him abundant prosperity and happiness in the evening of his life.

Resolved, That a copy of these resolutions be sent to Mr. Barrell, and also spread on the records of the doings of the school board of Cambridge."

Mr. Barrell was appointed master of the Putnam school October, 1874, and was transferred to the Harvard school April, 1881. Before coming to Cambridge, he had been a prominent teacher in New Bedford, and in Lewiston, Maine.

When it was known that Mr. Barrell was to end his connection with the schools, there was a general feeling that there should be some recognition of the event. The first opportunity came at the time of the graduation exercises, at the close of the school year. This was an occasion for the immediate friends of the school. The hall of the school was filled to overflowing. Fitting words were spoken. Pleasant memories were awakened; and all present realized, perhaps as never before, how useful a teacher's life may be.

The second opportunity came when the Cambridge club, composed of representative men from all parts of Cambridge, invited Mr. Barrell to be its guest. In presenting Mr. Barrell, the president, Prof. Albert Bushnell Hart, spoke of his long and faithful service, and then called upon Ex-Mayor Hall to extend the greetings of the club. Mr. Hall spoke at length upon the teachers' work, and upon the service Mr. Barrell had rendered the city. He closed with these words: "We extend to you our salutations, and I know I express the thought not only of the Cambridge club, but of thousands of our citizens when I say it is our cordial desire that the remaining years of your life, which we trust may be many, will be serene and full of quiet content, and bright with the anticipation

of the reward that awaits those who are faithful unto death. May life's current flow on calm and peaceful as the quiet river as it nears the great ocean, and when it comes may the hour of transition be your hour of translation to higher service!"

Mr. Barrell in his reply said that the Cambridge club's appreciation of his efforts would always be a joy to him, and that it touched him as no other evidence of regard ever touched him before.

A third opportunity was given by the graduates of the Harvard school. A reception was planned, and on this occasion the friends of Mr. Barrell showed their personal interest, not only by their presence and words, but in a more substantial way, reminding him in so doing of the delights of travel and of living under sunny skies during our winter days. His Honor Mayor Dickinson, presided on the occasion. The following from the Cambridge Chronicle is an account of the reception: — "It was a thoroughly representative Cambridge audience. Among the six hundred or more who were present were many of the leading men of the city. Besides those especially interested in school affairs many others came. It was not alone Mr. Barrell, the teacher, who was honored, but Mr. Barrell, the man, Mr. Barrell, the faithful worker, Mr. Barrell, the patriotic citizen. All these points were well brought out in the complimentary speeches which were made, and which all felt were spoken not alone with the lips, but with the heart. Musical selections were rendered during the evening by the high school orchestra, and a solo was given by Mr. Otis Niles."

The speakers represented the state board of education, the city of Cambridge, the school committee, the masters of the schools, the teachers of the Harvard school, the graduates of that school, and Post 30, G. A. R., which presented him with a beautiful silk flag. Other speakers were Rev. Alexander McKenzie, D. D., who was a member of the school board when Mr. Barrell was elected, and Mr. William E. Hatch, superintendent of the schools of New Bedford, where Mr. Barrell taught for thirteen years.

Mr. Barrell responded in part as follows: — "This is a red-letter day to me. It brings me the crowning honor of my life. I feel that you are all my friends, and I have no words to express my gratitude to you. These expressions come to me at a time when I can best appreciate them. I am conscious how far short I have come of my ideals, and I am equally sure that I have conscientiously tried to do my duty. For all these expressions and for this generous gift, you have my most hearty thanks." Mr. Barrell's remarks were followed by an informal reception, and this brought to a close the exercises of the evening.

EXAMINATION OF TEACHERS.

It is now many years since there was a formal examination as to the educational qualifications of applicants for the position of teacher in Cambridge. Educational qualifications are essential, but these alone do not insure successful teaching. The personality of the teacher is an important element. The spirit in which the work is done in its far-reaching influence is even more important than the work itself.

The educational qualifications of a teacher are now determined by the years of preparation he has had, as shown by the schools or college from which he was graduated. A college course is required for an appointment in our high schools, and a high school course and a normal school course or an equivalent, for an appointment in the grammar and primary schools. In addition to this a year's experience in teaching is also required.

The other qualifications of a teacher cannot be fully ascertained except in the schoolroom. In Cambridge, provision has been made by which the work of the teacher shall be seen before a permanent appointment is made. More than one-half of the teachers appointed are from the Wellington training school, where the character of their work is fully known, and frequent appointments are made from among the teachers who as substitutes give promise of success. Other teachers are selected from outside of Cambridge after their schools have been visited.

In these ways the superintendent becomes acquainted with the preparation and work of a teacher before he makes a nomination. Nominations are referred to the committee on teachers, and all teachers are visited by one or more members of this committee. They are also visited by two teachers deputed by the superintendent, and these teachers make a report in writing. These reports and a report from the principal of the school are considered by the committee on teachers before any action is taken.

It is not usual that teachers are called upon by school committees to share in the responsibility of new appointments. The superintendent knows of no other city where the teachers are thus honored. It is one of the "Cambridge Ideas," the thought of the school committee. It is an added safeguard in the appointment of teachers. It is more than this. It is an added influence for better teaching on the part of those who are already in the schools. No teacher can visit the room of another for the purpose of reporting on the character of the work without comparing his own methods of discipline and instruction with those of the teacher visited.

The rule of the committee is as follows:— "When a teacher has been nominated for a position in a kindergarten or primary school, or for a position below that of principal or master in a grammar school or high school, two persons of experience among the teachers who are not connected with the school in which the nominee is to serve, shall be deputed by the superintendent to visit the teacher nominated and to examine him at work. Each person so deputed shall report in writing to the superintendent; and these reports shall be kept on file by him and shall be open to inspection by members of the Board only. For a nomination to a position in a high school, the superintendent, with the consent of the committee on high schools, may dispense with such examination, or may depute as examiners teachers connected with the school in which the nominee is to serve, or persons not in the service of the city."

That the reports of the teachers may not be too general in character, they are requested to consider, first, the order of the school; second, the teacher's manner towards the pupils; third, the methods of instruction.

A few selections from these reports will show their character and value. In regard to the order of the school one says: "Teacher and pupils understand each other. Spirit of the room is excellent." Another speaks of the order thus: "Freedom of movement allowed, a wholesome atmosphere, ready response to teacher's least request."

Of the teacher's manner towards her pupils one used these words: "Attractive, gently insistent, quiet dignity, combined with bright earnestness which evidently impressed pupils." Another wrote this: "Her manner was that of an accomplished woman." Another this: "The teacher's manner towards her pupils, though somewhat distant, was not unpleasant." Another this: "She was very patient towards dull children. She was very firm."

One speaks of methods of instruction as follows: "Taught subjects-not pages of matter; encouraged independent research; demanded intelligent oral expression; ways varied according to needs of pupils; objective point gained before subject was dismissed." This teacher added, "The visit was a helpful one to me."

The whole plan by which teachers find a permanent position in Cambridge has the hearty approval of the superintendent.

FRANCIS COGSWELL,
Superintendent of Public Schools.

IN SCHOOL COMMITTEE, February 20, 1902.

Ordered, That the report of the superintendent as read and outlined by him be accepted and adopted as the annual report of the school committee for 1901, and that the secretary be authorized to append the names of the members thereto.

SANFORD B. HUBBARD,
Secretary.

Members of the School Committee for 1901

DAVID T. DICKINSON, *Chairman ex officio.*

WILLIAM TAGGARD PIPER.	PHILIP M. FITZSIMONS.
*FRANK W. TAUSSIG.	ROBERT WALKER.
CHARLES H. THURSTON.	CHARLES F. WYMAN.
†ROBERT O. FULLER.	MARY E. MITCHELL.
CAROLINE L. EDGERLY.	SHERMAN R. LANCASTER.
GEORGE W. BICKNELL.	CAROLYN P. CHASE.
‡J. HENRY RUSSELL.	†SETH N. GAGE.
EDWARD B. MALLEY.	ARTHUR P. STONE.
‡WILLIAM J. MANDELL.	

* Resigned Sept. 30, 1901. † Resigned March 21, 1901. ‡ Elected April 9, 1901.

REPORT OF THE BOARD OF CEMETERY COMMISSIONERS

CAMBRIDGE, December 2, 1901.

To the Honorable, the City Council: —

The Board of Commissioners of the Cambridge Cemetery respectfully submits its forty-eighth annual report, the same being for the year ending November 30, 1901.

The amount appropriated at the beginning of the year was	$18,000 00
The total amount of expenditure was	18,150 12

For a detailed account of expenses, reference is made to the City Auditor's Report.

The receipts of the year have been as follows:—

Burial and tomb fees	$4,380 00
Care of lots	2,213 00
Sale of lots and graves	7,380 35
Foundations, brick graves, etc.	1,362 21
Interest on Cemetery Fund	1,834 78
Sundries	296 05
Total	$17,466 39
The estimated revenue by this Board was	17,500 00
Decrease of revenue over estimate	$33 61

An examination of the above statistics reveals a fairly satisfactory condition.

Contrary to the experience of the past few years, the number of lots sold has shown a marked increase, the amount received from this source alone being some $1,800 in excess of last season.

The number of interments, however, have been ninety less than the preceding year.

The decrease in the number of interments has of course necessarily resulted in a smaller revenue for burial and tomb fees, the total amount of which has been over $500 less than was anticipated.

The receipts from the care of lots still continue to fall short of a reasonable estimate, and a net result showing $160 less than last season's unusually small amount, is not an encouraging sign.

This loss is, however, almost met by the increased revenue from the Perpetual Care Fund, and another year's report will undoubtedly show a

still greater return from this source, which will be available for the care and improvement of the Cemetery.

In the last report the attention of lot owners was especially called to the advantage of placing their holdings in the perpetual care of the City, and it is gratifying to note that the suggestion then made has given such an impetus to this feature of Cemetery work, that already $5,279.63 have been added to the Fund, being an increase of more than $2,500 over any one year since the establishment of the Perpetual Care Fund.

This Fund now amounts to $54,543.18 and from the continual inquiries made by lot owners, it is felt that a more general use of this system of caring for lots will undoubtedly result to the mutual advantage of the lot owner and the City.

In this respect it is further recommended that prospective purchasers of lots consider the advantage of arranging for the placing of lots in perpetual care at the time of purchase, thus absolutely and at once providing the means of future care with the least inconvenience to themselves.

The method of lighting the office at the Cemetery is inadequate. The present system of lamps is antiquated and dangerous, and it might be well to specially allow enough money to introduce the gas system from Coolidge Avenue.

This would reduce the liability to loss by fire and provide a more satisfactory means of lighting the building.

Early in the coming season it is hoped to push to completion the range of graves for a public lot in the vicinity of River Avenue. A plot of land, sufficient for one hundred and thirty-six graves has been surveyed and leveled.

The painting of the buildings at the Cemetery should be allowed this season and this work will probably cost $150.00.

The Superintendent strongly advises the regrading and resurfacing of several of the older avenues, and during the coming season a portion of River and Summit Avenues, Meadow, Central and Oak Avenues should be thoroughly rebuilt.

These avenues have never been properly graded, being originally laid out over pasture land, and they should receive a solid foundation to ensure their maintenance in good condition.

The following statistics are taken from the Superintendent's report :—

Number of lots prepared	0
Estimated value of the same	0
Number of lots ready for sale	218
Estimated value of the same	$36,031 86
Number of single graves ready for sale	217
Estimated value of the same	$4,140
Number of interments	647
Number of removals to other Cemeteries	13

Number of interments in Cemetery (total)	24,170
Number of burials (Overseers of Poor)	34
Number of lots sold	38
Number of graves sold	25
Average number of men employed	18

METROPOLITAN PARK COMMISSION.

The negotiations, which have been under way for the past two years between the Metropolitan Park Commission and this Board with reference to the exchange of certain portions of the Cemetery lands for lands of said Park Commission adjoining the Cemetery, are nearing culmination, and early in the financial year of 1902 the sum of $1,300, agreed upon as a bonus to be paid by the Commonwealth, will be available for Cemetery uses.

All doubt of the right of the City to deed, and of the Commonwealth to receive these lands, has been removed by the decree of the Supreme Judicial Court of the Commonwealth, dated November, 4, 1901, in which the Court also provided that "said purchase money may be received, held and used by said City of Cambridge for Cemetery purposes and uses."

ADDITIONAL LANDS.

In the last report of this Board the recommendation was urged for the appointment of a committee of the City Council to secure for the City the territory on Coolidge Avenue adjoining the Cemetery on the northerly side.

This property comprises about five acres of land, belonging to the Mt. Auburn Cemetery Corporation, and, from several points of view, it is deemed desirable to purchase or otherwise secure control of it for the uses of the Cemetery.

That the matter might be expeditiously considered, a communication was addressed to the City Council, early in January last, renewing the recommendation in the last report. This communication was referred to the Committee on Public Property of the City Council, but no action has been taken on the matter, other than a view of the premises by the Committee.

In view of these facts, the Board again urges the advisability of acquiring these lands, by purchase or otherwise, at an early date.

Propositions have been made between the representatives of the Mt. Auburn Corporation and this Board, which seem to indicate a willingness on the part of the present owners to dispose of their property, and the present would therefore seem to be a most favorable opportunity for a transfer of ownership.

Should it prove to be impossible, however, to arrive at an agreement with the present owners, it is felt that steps should at once be taken to secure control by right of eminent domain.

SOLDIERS' AND SAILORS' LOTS.

The above named lots are in a generally satisfactory condition.

The older lot on Prospect Avenue must soon be altered so as to provide for the removal of the tablets,— many of which are rotting,— and it would appear that the most desirable way to renovate this lot would be by re-surfacing and laying it out as a green expanse without flower beds, and with tablets substantially similar to those in the new lot.

The present system of flower beds requires considerable attention, but even with the exercise of care and skill, the result throughout the season is not quite satisfactory. Probably $100.00 would be sufficient to change this lot.

The appearance of the lot on Summit Avenue has met with approval from all visitors and it is not the intention of this Board to make any change in this lot during the coming season.

The data having been verified, the service of each soldier or sailor already interred in the lot has been cut on each tablet, thus making the inscriptions complete.

LOW LAND FILLING.

At the close of the last financial year, there remained unexpended a balance of $1,055.73 on the low land filling account.

The filling of the hole where the pond formerly existed is practically completed and the fill is now in condition to be shaped ready for the loaming during the coming winter.

The balance now unexpended, viz.: $1,055.73, will probably be sufficient to complete the work necessary to prepare this lot for seeding in the spring.

GEORGE S. SAUNDERS, *Chairman*,
HERBERT A. CHASE,
WILLIAM A. BERTSCH,
CHARLES O. WELCH,
NATHAN C. LOMBARD,
JOHN H. H. McNAMEE,

Board of Cemetery Commissioners.

APPENDIX

ORDINANCES

PASSED BETWEEN FEBRUARY 27, 1901, AND MARCH 28, 1902, AND AMENDMENTS TO REGULATIONS OF THE BOARD OF ALDERMEN PASSED BETWEEN APRIL 3, 1900, AND MARCH 28, 1902.

AN ORDINANCE IN AMENDMENT OF AN ORDINANCE ENTITLED STREETS.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Chapter 25, of the Revised Ordinances of 1892, as amended to November 8, 1899, is hereby amended as follows: —

In Section 8, by adding at the end thereof the words: "except that no street shall be given the designation of any existing street, and no street shall be accepted so long as the name thereof is the same as that of any existing street."

As amended the section will read as follows: —

SECT. 8. The several streets in the City shall continue to be called and known by the names heretofore given them, until such names are altered by the City Council. The City Council shall give names to all streets hereafter laid out, and may change the name of a street at any time, except that no street shall be given the designation of any existing street, and no street shall be accepted so long as the name thereof is the same as that of any existing street. [*Approved March* 22, 1901.

AN ORDINANCE IN AMENDMENT OF AN ORDINANCE ENTITLED DUTIES AND SALARIES.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Section 30, of Chapter 28, of the Revised Ordinances of 1892, as amended to November 8, 1899, is hereby amended in relation to the salaries of Captains of Hook and Ladder Companies, by striking out the figures $880, at the end of the line, "First twelve months of service," and inserting in place thereof the figures, $1,050; also by striking out the figures $980, at the end of the line, "Second twelve months of service," and inserting in place thereof the figures, $1,065.

As amended, the four lines relating to the salaries of Captains of Hook and Ladder Companies will read as follows: —

First twelve months of service, $1,050; second twelve months of service, $1,065; after two years of service, $1,080. [*Approved March* 28, 1901.

An Ordinance in Amendment of an Ordinance Entitled Fire.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Sections 9 and 12, of Chapter 11, of the Revised Ordinances of 1892, as amended to November 8, 1899, are hereby amended by striking out of each section, where they occur, the words: "The Captain and Lieutenant shall be nominated by the Chief Engineer for appointment by the Mayor and Aldermen." [*Approved April* 10, 1901.

An Ordinance in Amendment of Certain City Ordinances in Relation to Official Bonds.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Section 1. All City officials required to give bonds, shall hereafter give on their official bonds some incorporated surety company as surety, unless the Mayor shall be satisfied that a satisfactory surety of this character cannot be obtained at a reasonable premium, in which case he may accept individuals as sureties. They shall also give a new bond satisfactory to the Mayor, whenever required by him to do so.

Sect. 2. The amount paid as premium for surety upon any bond aforesaid shall not exceed one-half of one per cent of the penal sum named therein, and shall be allowed and paid as an expense of the department of which the principal on the bond is an officer or employee.

Sect. 3. So much of Chapters 4, 7 and 26, of the Revised Ordinances of 1892, of the City of Cambridge, as amended to November 8, 1899, as may be inconsistent herewith, is hereby repealed. [*Approved April* 18, 1901.

An Ordinance in Amendment of an Ordinance in Relation to Water Works.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Section 24, of Chapter 27, of the Revised Ordinances of 1892, as amended to November 8, 1899, is hereby further amended in the sentence relating to the minimum charge for metered water by striking out the word "fifteen," where it occurs, and inserting in place thereof the word "five."

As amended the sentence will read as follows: —

"In no case however shall the minimum charge for metered water be less than five dollars."

This amendment shall take effect as of April 1, 1901. [*Approved June* 6, 1901.

An Ordinance in Relation to the Sale of Goods, Wares and Merchandise in the Public Ways.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Section 1. No person shall, except in accordance with a permit from the Superintendent of Streets, sell upon any sidewalk of any public way, any goods or article to a person on such public way; or, except in accordance with a permit as aforesaid, permit to remain in any public way, for more than ten minutes, any goods or article of which he is the owner or in charge.

Sect. 2. No person shall hawk or peddle any of the articles enumerated in Section 1, of Chapter 68, of the Public Statutes, until he shall have recorded his name and residence with the City Clerk and been given a permit therefor by the Board of Aldermen, and been assigned by the City Clerk a number: provided, however, that the foregoing provisions shall not apply to licenses issued under authority of the Board of Aldermen to minors. The fee for the permit aforesaid shall be fifty cents.

Sect. 3. No person hawking, peddling, or selling, or exposing for sale, any of the articles enumerated in Section 1, of Chapter 68, of the Public Statutes, shall cry his wares to the disturbance of the peace and comfort of the inhabitants of the City.

Sect. 4. No hawker or peddler shall carry or convey any of the articles enumerated in Section 1, of Chapter 68, of the Public Statutes, in any manner that will tend to injure or disturb the public health or comfort, and, if such articles are perishable in their nature, they shall be conveyed in vehicles or receptacles which are neat and clean and do not leak. Any vehicles, used as aforesaid, shall have printed on them in letters and figures at least two inches in height, the name of the person selling and the number given him by the Board of Aldermen.

Sect. 5. No hawker or peddler shall sell any of the articles enumerated in Section 1, of Chapter 68, of the Public Statutes, when said articles are sold by weight or measure, until such weight and measure shall have been stamped by the Sealer of Weights and Measures of this City.

Sect. 6. The permit mentioned in Sections 1 and 2 shall state the condition and terms under which said permission shall be granted, with all of which the licensee shall be deemed to comply by accepting the permit, and a violation of any of the terms of said permit shall of itself be a sufficient cause for the revocation thereof.

Sect. 7. Any person violating any of the provisions of this ordinance shall be liable to a penalty of not exceeding twenty dollars for each offence. [*Approved July* 23, 1901.

AN ORDINANCE IN AMENDMENT OF AN ORDINANCE ENTITLED CONSTRUCTION, MAINTENANCE AND INSPECTION OF BUILDINGS.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Section 31, of Chapter 13, of the Revised Ordinances of 1892, as amended to November 8, 1899, is hereby further amended by adding after the word "lot" in the third line of said section, the words "without the approval of the City Council."

As amended said section shall read as follows: —

SECT. 31. No building hereafter erected or altered, which is to be used in whole or in part for stable purposes, shall be built nearer than five feet to any adjoining lot without the approval of the City Council, nor, if there is a dwelling house upon the adjoining lot, be nearer than fifteen feet to such dwelling house without the approval of the City Council, except that on the rear line of a lot such stable may be within eighteen inches of such line when it does not intersect the line of any public street. [*Approved July* 23, 1901.

AN ORDINANCE IN AMENDMENT OF AN ORDINANCE ENTITLED GENERAL REGULATIONS FOR STREETS, COMMONS, RESERVOIRS AND OTHER PUBLIC PLACES.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Section 35, of Chapter 45, of the Revised Ordinances of 1892, as amended to November 8, 1899, is hereby amended by adding at the end thereof the words "nor on any public street or way."

As amended the section will read as follows: —

SECT. 35. No person, except by permission of the Mayor, shall deliver a sermon, lecture, address or discourse on any common or other public grounds, nor on any public street or way. [*Approved July* 23, 1901.

AN ORDINANCE IN AMENDMENT OF AN ORDINANCE ENTITLED WARDS.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Chapter 33, of the Revised Ordinances of 1892, as amended to November 8, 1899, is hereby amended by striking out the entire chapter and inserting in place thereof the following: —

SECTION 1. The eleven wards of the City shall be constituted as follows: —

Ward 1. Beginning at the water at the mouth of Broad canal, thence by the centre of Broad canal to the centre of Third street, thence by the centre of Third street to Potter street, thence by the centre of Potter street to Fifth street, thence by the centre of Fifth street to Vine street, thence by the centre of Vine street to Fourth street, thence by the centre of Fourth street to Cambridge street, thence by the centre of Cambridge

street to Fifth street, thence by the centre of Fifth street and said line extended northerly to the boundary line between Cambridge and Somerville, thence by said boundary line to the waters of Charles river, thence by the water to the point of beginning.

Ward 2. Beginning at the centre of Third street and Broad canal, thence by the centre of Broad canal to North canal, thence by the centre of North canal and northerly in a line continued therefrom to the boundary line between Cambridge and Somerville, thence by said boundary line to a line in the extension of the centre line of Fifth street, thence by said extension and by the centre line of Fifth street to Cambridge street, thence by the centre line of Cambridge street to Fourth street, thence by the centre line of Fourth street to Vine street, thence by the centre line of Vine street to Fifth street, thence by the centre line of Fifth street to Potter street, thence by the centre line of Potter street to Third street, thence by the centre line of Third street to Broad canal at the point of beginning.

Ward 3. Beginning at the boundary line between Cambridge and Somerville at Tremont street, thence by said boundary line to the extension of the centre line of North canal, thence by said extension and by the centre line of North canal to Binney street, thence by the centre line of Binney street to Bristol street, thence by the centre line of Bristol street to Hampshire street, thence by the centre line of Hampshire street to Tremont street, thence by the centre line of Tremont street to the boundary line between the cities of Cambridge and Somerville at the point of beginning.

Ward 4. Beginning at Tremont street, on Hampshire street, thence by the centre line of Hampshire street to Bristol street, thence by the centre line of Bristol street to Binney street, thence by the centre line of Binney street to North canal, thence by the centre line of North canal to Broad canal, thence by the centre line of Broad canal to the water of Charles river, thence by the water of Charles river to a point at right angles to Main street at Washington street, thence by a line at right angles to Main street to the junction of Main and Washington streets, thence by the centre line of Washington street to Norfolk street, thence by the centre line of Norfolk street to Massachusetts avenue, thence by the centre line of Massachusetts avenue to Prospect street, thence by the centre line of Prospect street to Broadway, thence by the centre line of Broadway to Tremont street, thence by the centre line of Tremont street to Hampshire street at the point of beginning.

Ward 5. Beginning at the boundary line between Cambridge and Somerville at Tremont street, thence by the centre line of Tremont street to Broadway, thence by the centre line of Broadway to Prospect street,

thence by the centre line of Prospect street to Massachusetts avenue, thence by the centre line of Massachusetts avenue to Dana street, thence by the centre line of Dana street and said line extended northerly to the boundary line between Cambridge and Somerville, thence by said boundary line to Tremont street at the point of beginning.

Ward 6. Beginning on Massachusetts avenue at Norfolk street, thence by the centre line of Norfolk street to Washington street, thence by the centre line of Washington street to the junction of Washington and Main streets, thence by a line at right angles to Main street southerly to the water of Charles river, thence by the water to the centre line of Magazine street extended, thence by said extension and by the centre line of Magazine street to Perry street, thence by the centrè line of Perry street to Pearl street, thence by the centre line of Pearl street to Massachusetts avenue, thence by the centre line of Massachusetts avenue to Norfolk street at the point of beginning.

Ward 7. Beginning on Massachusetts avenue at Putnam avenue, thence by the centre line of Massachusetts avenue to Pearl street, thence by the centre line of Pearl street to Perry street, thence by the centre line of Perry street to Magazine street, thence by the centre line of Magazine street, and said line extended southerly to the water of Charles river, thence by said water to Western avenue, thence by the centre line of Western avenue to Putnam avenue, thence by the centre line of Putnam avenue to Massachusetts avenue at the point of beginning.

Ward 8. Beginning at the boundary line between Cambridge and Somerville at Sacramento street, thence along said boundary line to its intersection with the centre line of Dana street extended northerly, thence along said extension and the centre line of Dana street to Massachusetts avenue, thence along the centre line of Massachusetts avenue to Putnam avenue, thence along the centre line of Putnam avenue to Western avenue, thence along the centre line of Western avenue to the water of Charles river, thence by the water of Charles river to Boylston street, thence by the centre line of Boylston street to Massachusetts avenue, thence by the centre line of Massachusetts avenue to Jarvis street, thence by the centre line of Jarvis street to Oxford street, thence by the centre line of Oxford street to Sacramento street, thence by the centre line of Sacramento street to the boundary line between Cambridge and Somerville at the point of beginning.

Ward 9. Beginning at the boundary line between Cambridge and Belmont at Concord avenue, thence along the centre line of Concord avenue to Bond street, thence along the centre line of Bond street to Garden street, thence along the centre line of Garden street to Shepard street, thence along the centre line of Shepard street to Massachusetts avenue,

thence along the centre line of Massachusetts avenue to Sacramento street, thence along the centre line of Sacramento street to Oxford street, thence along the centre line of Oxford street to Jarvis street, thence along the centre line of Jarvis street to Massachusetts avenue, thence along the centre line of Massachusetts avenue to Boylston street, thence along the centre line of Boylston street to the water of Charles river, thence by the water of Charles river to the boundary line between Cambridge and Watertown, thence along said boundary line to the boundary line between Cambridge and Belmont, thence along said last named boundary to Concord avenue at the point of beginning.

Ward 10. Beginning at the boundary line between Cambridge and Belmont at Concord avenue, thence along said boundary to the location of the Fitchburg railroad, thence along the centre line of said location to the boundary line between Cambridge and Somerville, thence along said last named boundary to Sacramento street, thence along the centre line of Sacramento street to Massachusetts avenue, thence along the centre line of Massachusetts avenue to Shepard street, thence along the centre line of Shepard street to Garden street, thence along the centre line of Garden street to Bond street, thence along the centre line of Bond street to Concord avenue, thence along the centre line of Concord avenue to the boundary line between Cambridge and Belmont at the point of beginning.

Ward 11. Beginning at the boundary line between Cambridge and Somerville at the Fitchburg railroad, thence along the centre line of the location of said railroad to the boundary line between Cambridge and Belmont, thence along said last named boundary line to the boundary line between Cambridge and Arlington, thence along said boundary line between Cambridge and Arlington to the boundary line between Cambridge and Somerville, thence along said last mentioned boundary to the Fitchburg railroad at the point of beginning.

Sect. 2. The several wards of the City shall each elect two members of the Common Council.

Sect. 3. This ordinance shall take effect for election purposes on the first day of November in the year nineteen hundred and two; for all other purposes on the first day of May in the year nineteen hundred and two. [*Approved August* 5, 1901.

An Ordinance in Amendment of an Ordinance in Relation to the Sale of Goods, Wares and Merchandise in the Public Ways.

Be it ordained by the City Council of the City of Cambridge, as follows:—

Section 1 of an ordinance in relation to the sale of goods, wares and merchandise in the public ways, approved July 23, 1901, is hereby amended by adding thereto the words "The fee for the permit aforesaid shall be fifty cents."

As amended the section will read as follows: —

Section 1. No person shall, except in accordance with a permit from the Superintendent of Streets, sell upon any sidewalk of any public way, any goods or article to a person on such public way; or, except in accordance with a permit as aforesaid, permit to remain in any public way for more than ten minutes, any goods or article of which he is the owner or in charge. The fee for the permit aforesaid shall be fifty cents. [*Approved October* 24, 1901.

An Ordinance in Amendment of an Ordinance Entitled Fire.

Be it ordained by the City Council of the City of Cambridge, as follows:—

Section 1, of Chapter 11, of the Revised Ordinances of 1892, as amended to November 8, 1899, relative to pensions for firemen, is hereby amended by striking out the entire section and inserting in place thereof the following:—

Section 1. The City Council may upon the recommendation of the Chief Engineer of the fire department, or upon his own petition, pension for such time and amount, as after due hearing thereon said City Council shall determine,—

First: Any member of the fire department, who by reason of permanent disability incurred while in the discharge of his duty in that department, is no longer able to perform active service.

Second: Any member of the fire department who has reached the age of 65 years and who has performed faithful service in that department for a period of not less than 20 years.

Third: Any member of the fire department who has performed faithful service in that department for a period of not less than 20 years, provided that he is incapacitated for further useful service. [*Approved December* 30, 1901.

An Ordinance In Amendment of an Ordinance in Relation to the Permanent Force of the Fire Department.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Section 9, of Chapter 11, of the Revised Ordinances of 1892, as amended to November 8, 1899, is hereby amended by adding at the end thereof the following: —

"The permanent force of the fire department shall be increased by two men, who shall be assigned as the Chief Engineer may direct: and the number of call men shall be reduced by one." [*Passed over veto December* 31, 1901.

AN ORDINANCE IN AMENDMENT OF AN ORDINANCE ENTITLED "CONSTRUCTION, MAINTENANCE AND INSPECTION OF BUILDINGS."

Be it ordained by the City Council of the City of Cambridge, as follows :—

Section 130, of Chapter 13, of the Revised Ordinances of the City of Cambridge, as amended to November 8, 1899, is hereby further amended as follows: By inserting after the words "and said Rindge avenue as aforesaid" being the last part of the last sentence of the description of the eighth Fire Limit District and before the words "in this ordinance" the following:—

Ninth. Starting on the westerly line of East street at the boundary line of the second Fire Limit District, thence running on said westerly line of East street to the southerly line of the location of the Southern division of the Boston & Maine Railroad, thence running westerly on said southerly line of location of said railroad continuously to the Somerville line, thence southerly on said Somerville line to the northerly line of said Bridge street, thence southeasterly on said northerly line of said Bridge street continuously to the boundary line of the second Fire Limit District at Lechmere square, including all that territory which lies between the said northerly line of Bridge street and southerly location of said railroad and easterly of that portion of the Somerville line between said Bridge street and said railroad, extending continuously easterly to said westerly line of East street, not including, however, any portion of the second Fire Limit District heretofore established.

Tenth. Starting at the intersection of the northerly line of Gore street with the westerly line of Fifth street and running continuously westerly therefrom on the said northerly line of Gore street to the Somerville line, and within the area included between the line of private ownership in said Cambridge adjacent to the northerly line of said Gore street and a line distant 100 feet to the right at right angles from each and every point of said street lines of said private ownership on the northerly side of Gore street between said Fifth street and said Somerville line.

Eleventh. Starting at the northwesterly extremity of the building line of the third Fire Limit District on the northerly line of Harvard street at Smith square and running continuously therefrom northwesterly on the said northerly line of Harvard street to the easterly line of Burleigh street, thence running northerly on said easterly line of Burleigh street to the southerly line of the fifth Fire Limit District, thence running northwesterly on said southerly line of the fifth Fire Limit District to the easterly line of Portland street, thence running southwesterly on the easterly line of Portland street to the southerly line of Harvard street,

thence running southeasterly on the southerly line of Harvard street to the easterly line of Munson street, thence running southwesterly on said easterly line of said Munson street to the northerly line of Hastings street, thence running southeasterly on the northerly line of Hastings street and so on continuously in the same direction until it reaches the northerly boundary line of the third Fire Limit District, and within the areas included between the lines of private ownership adjacent to the said northerly line of Harvard street to the easterly line of Burleigh street and the southerly line of Harvard street and lines within the territory just described respectively 100 feet to the right of the northerly line of Harvard street to the easterly line of Burleigh street and to the left of the southerly line of Harvard street to the easterly line of Munson street at right angles from each and every point of all said street lines of private ownership upon said Harvard street and including all the territory described bounded by Burleigh, Harvard and Portland streets and the southerly line of the fifth Fire Limit District and all the territory easterly of said part of said Munson street to the northerly boundary line of the third Fire Limit District, not, however, included in any of third or fifth Fire Limit Districts heretofore established within the territory just described.

Twelfth. All that territory which lies north of the Boston & Albany Railroad and is bounded easterly by the third Fire Limit District and westerly by the first Fire Limit District.

Thirteenth. All that territory which lies northwesterly of Boylston street and is bounded northeasterly by Mount Auburn street and Brattle square, northwesterly by Brattle square and Eliot square, westerly and southerly by Eliot square and Eliot street, not, however, included in the fourth Fire Limit District heretofore established.

Said section 130, thus amended after the description of the eighth Fire Limit District, will read after the words "said Rindge avenue as aforesaid" to said words "in this ordinance" as follows: —

Ninth. Starting on the westerly line of East street at the boundary line of the second Fire Limit District, thence running on said westerly line of East street to the southerly line of the location of the Southern division of the Boston & Maine railroad; thence running westerly on said southerly line of location of said Railroad continuously to the Somerville line, thence southerly on said Somerville line to the northerly line of said Bridge street, thence southeasterly on said northerly line of said Bridge street continuously to the boundary line of the second Fire Limit District at Lechmere square, including all that territory which lies between the said northerly line of Bridge street, said southerly location of said railroad and easterly of that portion of the Somerville line between said Bridge street and said railroad, extending continuously easterly to said

westerly line of East street, not including, however, any portion of the second Fire Limit District heretofore established.

Tenth. Starting at the intersection of the northerly line of Gore street with the westerly line of Fifth street and running continuously westerly therefrom on the said northerly line of Gore street to the Somerville line, and within the area included between the line of private ownership in said Cambridge adjacent to the northerly line of said Gore street and a line distant 100 feet to the right at right angles from each and every point of said street lines of said private ownership on the northerly side of Gore street between said Fifth street and said Somerville line.

Eleventh. Starting at the northwesterly extremity of the building line of the third Fire Limit District on the northerly line of Harvard street at Smith square and running continuously therefrom northwesterly on the said northerly line of Harvard street to the easterly line of Burleigh street, thence running northerly on said easterly line of Burleigh street to the southerly line of the fifth Fire Limit District, thence running northwesterly on said southerly line of the fifth Fire Limit District to the easterly line of Portland street, thence running southwesterly on the easterly line of Portland street to the southerly line of Harvard street, thence running southeasterly on the southerly line of Harvard street to the easterly line of Munson street, thence running southwesterly on said easterly line of said Munson street to the northerly line of Hastings street, thence running southeasterly on the northerly line of Hastings street and so on continuously in the same direction until it reaches the northerly boundary line of the third Fire Limit District; and within the areas included between the lines of private ownership adjacent to the said northerly line of Harvard street to the easterly line of Burleigh street and the southerly line of Harvard street and lines within the territory just described respectively 100 feet to the right of the northerly line of Harvard street to the easterly line of Burleigh street and to the left of the southerly line of Harvard street to the easterly line of Munson street at right angles from each and every point of all said street lines of private ownership upon said Harvard street and including all the territory described bounded by Burleigh, Harvard and Portland streets and the southerly line of the fifth Fire Limit District and all the territory easterly of said part of said Munson street to the northerly boundary line of the third Fire Limit District not, however, included in any of the third or fifth Fire Limit Districts heretofore established within the territory just described.

Twelfth. All that territory which lies north of the Boston & Albany Railroad and is bounded easterly by the third Fire Limit District and westerly by the first Fire Limit District.

Thirteenth. All that territory which lies northwesterly of Boylston street and is bounded northeasterly by Mount Auburn street and Brattle square, northwesterly by Brattle square and Eliot square, westerly and southerly by Eliot square and Eliot street, not, however, included in the fourth Fire Limit District heretofore established. [*Approved January* 3, 1902.

An Ordinance in Amendment of an Ordinance Entitled The Executive.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Section 10, of Chapter 2, of the Revised Ordinances of 1892, as amended to November 8, 1899, is hereby amended by inserting after the line "A Sealer of Weights and Measures," the following: —

A Deputy Sealer of Weights and Measures. [*Approved January* 3, 1902.

An Ordinance in Amendment of an Ordinance Entitled Duties and Salaries.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Section 30, of Chapter 28, of the Revised Ordinances of 1892, as amended to November 8, 1899, is hereby amended by inserting after the line "Sealer of Weights and Measures $1,000.00." the following: —

Deputy Sealer of Weights and Measures, $750.00. [*Approved January* 3, 1902.

An Ordinance in Amendment of an Ordinance Entitled Sealer of Weights and Measures.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Chapter 22, of the Revised Ordinances of 1892, as amended to November 8, 1899, is hereby amended so that the Chapter shall read as follows: —

Section 1. The sealer of weights and measures department shall be under the charge of the sealer of weights and measures. The department shall consist of a sealer of weights and measures and a deputy sealer of weights and measures, who shall hold their respective offices for the term of one year, from the first day of April, in the year of their appointment, subject to removal at any time by the Mayor and Aldermen.

The sealer of weights and measures shall have general control and supervision of all the public scales of the City, and in case of his absence or inability to perform his duties from any cause, the deputy sealer shall exercise said duties. Annually, in the month of December, he shall make a full report of all matters pertaining to his department, with an inventory of all property of the City in his charge. [*Approved January* 3, 1902.

AMENDMENTS TO REGULATIONS OF THE BOARD OF ALDERMEN

In Board of Aldermen,
April 3, 1900.

Ordered: —

That the Standing Regulations of the Board of Aldermen be and hereby are amended, in the provisions relating to billiard and other amusement licenses, as follows: —

By adding at the end of the present Regulation the following: —

"The fee for billiard, pool and sippio table licenses shall be two dollars ($2.00) for each table, and the fee for bowling alleys shall be two dollars ($2.00) for each alley." [*Approved April* 4, 1900.

In Board of Aldermen,
April 3, 1900.

Ordered: —

That the Standing Regulations of the Board of Aldermen be and hereby are amended as follows: —

By striking out in the title of the Regulations for Pawnbrokers, Dealers in Junk, Old Metals, and Second-hand Articles, all except the word "Pawnbrokers" and by adding after the Regulations for Pawnbrokers the following: —

Regulations for Dealers in Junk, Old Metals, Second-hand Articles and Rags.

Rule 1. The Chief of Police, the Deputy Chief of Police, and any police officer shall at all times have authority to inspect and examine all books kept by keepers of shops for the purchase, storage, sale, or barter of junk, old metals or second-hand articles, or rags, as well as any such shop and all articles and merchandise therein.

Rule 2. Every license to a dealer in, or keeper of a shop for the purchase, barter or storage of junk, old metals and second-hand articles, and to every collector and dealer in rags in this City, shall be issued by the City Clerk, and shall contain the requirements of the ordinances and regulations applicable thereto, and shall also contain, with reference to the license issued to collectors and dealers in junk, old metals, second-hand articles, and rags, the further provision that each such collector and dealer shall, in addition to his license, receive from the City Clerk a badge, for which he shall pay the sum of seventy-five cents ($ .75).

Rule 3. While engaged in the collection of junk, old metals, second-hand articles or rags, every person so licensed shall wear a badge in plain sight with the words "Cambridge Collector," and the number thereon, and shall, upon the request of any police officer, exhibit his license for inspection.

Rule 4. Upon the revocation or expiration of the license, or on the discontinuance of business by the licensee, every licensed collector shall be entitled to receive from the City Clerk the amount paid by him for his badge, upon delivery of said badge to the City Clerk.

Rule 5. The violation of any regulation relating to the aforesaid license shall be considered sufficient cause for revocation. [*Approved April* 4, 1900.

In Board of Aldermen,
April 24, 1900.

Ordered: —

That the Standing Regulations of the Board of Aldermen relative to the fees for billiard and pool and sippio table licenses and for bowling alleys, as approved April 4, 1900, be and hereby are amended by striking out the words "for each table" and "for each alley."

As amended the regulation will read as follows: —

The fee for billiard, pool and sippio table licenses shall be two dollars ($2.00), and the fee for bowling alleys shall be two dollars ($2.00). [*Approved April* 30, 1900.

In Board of Aldermen,
December 4, 1900.

Ordered: —

That the Regulation of the Board of Aldermen entitled "Salaries of certain City officers," be and hereby is amended as to the salary of Soldiers' Aid Clerk, by striking out the figures $900.00 and inserting in place thereof the figures $1,100.00.

As amended the line will read as follows: —

Soldiers' Aid Clerk	$1,100 00

This order shall take effect on the first day of December, 1900. [*Approved December* 11, 1900.

In Board of Aldermen,
January 1, 1901.

Ordered: —

That the Standing Regulations of the Board of Aldermen, with reference to Minors' Licenses, be amended in the second section thereof by striking out the fourth and fifth sentences in said section and inserting in place thereof the following: —

"The Chief of Police shall be entitled to receive the sum of twenty-five cents for issuing a license required by these rules and regulations,

and shall furnish the licensee with a badge for which said licensee shall deposit the sum of sixty cents.

Said licensee must return such badge upon the expiration or surrender of his license, and he shall be entitled to receive the sum of sixty cents therefor, provided that such badge is in a reasonably good condition." [*Approved January* 2, 1901

In Board of Aldermen,

Ordered: — March 19, 1901.

That the Regulation of this Board relative to the salaries of members of the reserve police force be, and hereby is, amended by striking out the words and figures "each 730 a year", and inserting in place thereof the words: —

First year of service, each . .	$730 00
Second year of service . . .	821 25
After two years of service and until appointed on the regular force, each	912 50

[*Approved March* 22, 1901.

MAYORS OF THE CITY OF CAMBRIDGE

(From 1846 to 1902 Inclusive)

James D. Green	From May,	1846,	to April,	1848
Sidney Willard	" April,	1848,	to April,	1851
George Stevens	" April,	1851,	to April,	1853
James D. Green	" April,	1853,	to April,	1854
*Abraham Edwards	" April,	1854,	to January,	1855
Zebina L. Raymond	" January,	1855,	to January,	1856
John Sargent	" January,	1856,	to January,	1860
†James D. Green	" January,	1860,	to July 24,	1861
‡Charles Theo. Russell	" July 31,	1861,	to January,	1863
George C. Richardson	" January,	1863,	to January,	1864
Zebina L. Raymond	" January,	1864,	to January,	1865
J. Warren Merrill	" January,	1865,	to January,	1867
Ezra Parmenter,	" January,	1867,	to January,	1868
Charles H. Saunders	" January,	1868,	to January,	1870
Hamlin R. Harding	" January,	1870,	to January,	1872
Henry O. Houghton	" January,	1872,	to January,	1873
Isaac Bradford	" January,	1873,	to January,	1877
Frank A. Allen	" January,	1877,	to January,	1878
Samuel L. Montague	" January,	1878,	to January,	1880
James M. W. Hall	" January,	1880,	to January,	1881
James A. Fox	" January,	1881,	to January,	1885
William E. Russell	" January,	1885,	to January,	1889
Henry H. Gilmore	" January,	1889,	to January,	1891
Alpheus B. Alger	" January,	1891,	to January,	1893
William A. Bancroft	" January,	1893,	to January,	1897
Alvin F. Sortwell	" January,	1897,	to January,	1899
Edgar R. Champlin	" January,	1899,	to January,	1901
David T. Dickinson	" January,	1901,	to January,	1902
John H. H. McNamee	" January,	1902.	Now in office.	

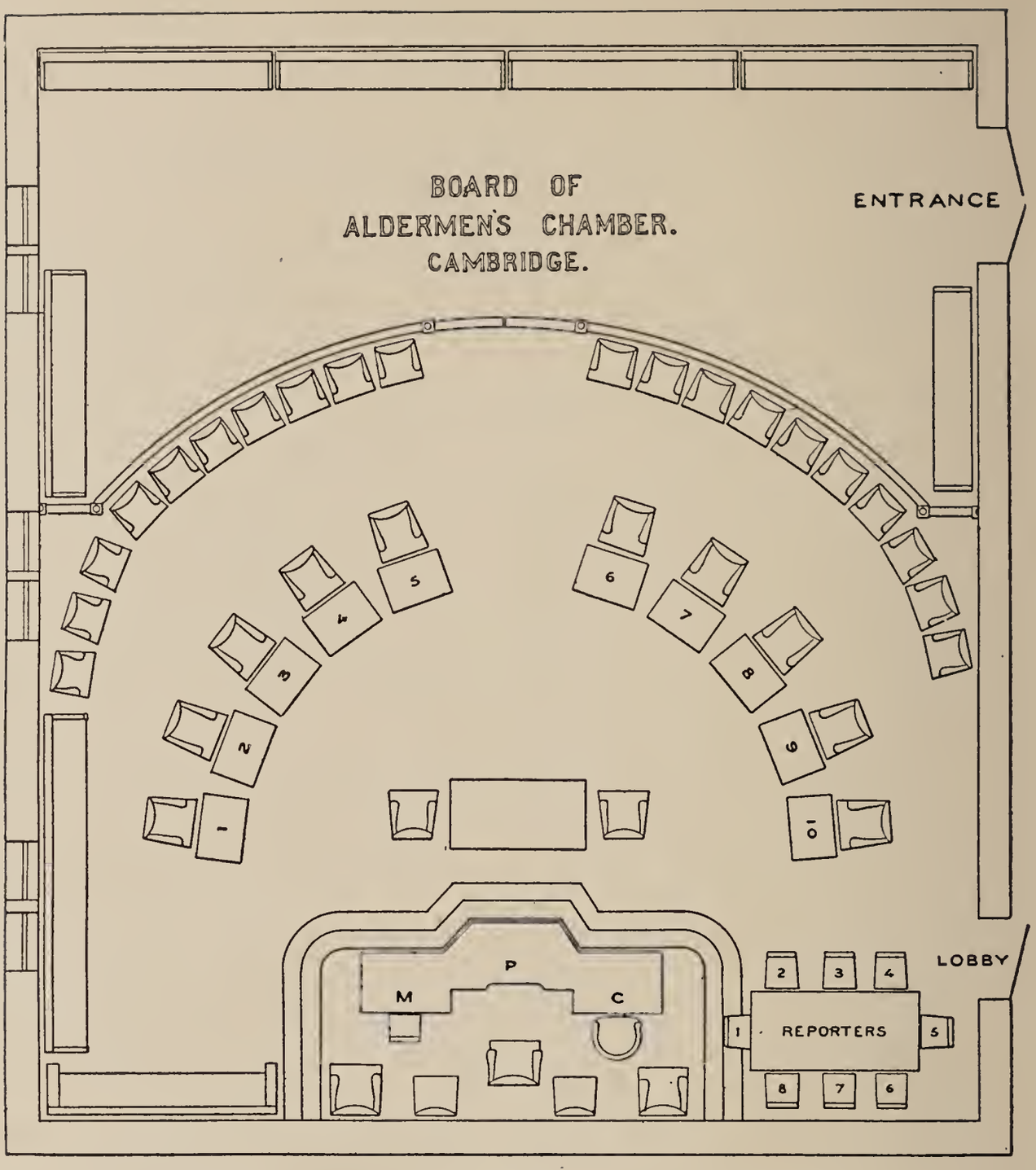
*Municipal year changed. †Resigned. ‡First elected by the City Council.

PRESIDENTS OF THE BOARD OF ALDERMEN

1888	Edward W. Hincks.	1896	John R. Fairbairn.
1889	John H. Corcoran.	1897	Russell Bradford.
1890	Alvin F. Sortwell.	1898	Russell Bradford.
1891	William A. Bancroft.	1899	Walter C. Wardwell.
1892	William A. Bancroft.	1900	Walter C. Wardwell.
1893	John R. Fairbairn.	1901	George E. Saunders.
1894	John G. Thorogood.	1902	James F. Aylward.
1895	John R. Fairbairn.		

PRESIDENTS OF THE COMMON COUNCIL

1846 Isaac Livermore.
1847 John Sargent.
1848 John C. Dodge.
1849 Samuel P. Heywood.
1850 Samuel P. Heywood.
1851 John S. Ladd.
1852 John Sargent.
1853 John Sargent.
1854 John C. Dodge.
1855 Alanson Bigelow.
1856 Ezra Ripley. Resigned January 31.
1856 George S. Saunders. Elected January 31.
1857 George S. Saunders.
1858 James C. Fisk.
1859 James C. Fisk.
1860 Hamlin R. Harding.
1861 Hamlin R. Harding.
1862 Jared Shepard. Resigned September 17.
1862 Knowlton S. Chaffee. Elected September 24.
1863 George S. Saunders.
1864 George S. Saunders.
1865 John S. March.
1866 John S. March.
1867 Marshall T. Bigelow.
1868 Knowlton S. Chaffee. Resigned February 4.
1868 Henry W. Muzzey. Elected February 4.
1869 Henry W. Muzzey.
1870 Joseph H. Converse.
1871 Joseph H. Converse.
1872 Alvaro Blodgett.
1873 Alvaro Blodgett. Resigned June 17.
1873 Francis H. Whitman. Elected June 17.
1874 George F. Piper.
1875 George F. Piper.
1876 Frank A. Allen.
1877 Perez G. Porter.
1878 George S. Saunders.
1879 George S. Saunders.
1880 Charles Walker.
1881 Charles Walker.
1882 George H. Howard.
1883 George H. Howard.
1884 George H. Howard.
1885 Cornelius G. H. Bennink.
1886 John H. Corcoran.
1887 John H. Corcoran.
1888 Alvin F. Sortwell.
1889 Edward A. Bingham.
1890 Edward A. Bingham.
1891 Edward C. Wheeler.
1892 Herbert A. Chase.
1893 J. Henry Russell.
1894 Charles M. Conant.
1895 John L. Odiorne.
1896 John L. Odiorne.
1897 Albert S. Apsey.
1898 George E. Saunders.
1899 William F. Brooks.
1900 John D. Merrill.
1901 John D. Merrill.
1902 Thorndike Spalding.



KEY TO ALDERMEN'S CHAMBER

CITY HALL, CAMBRIDGE

1902

P — James F. Alyward, *President.*

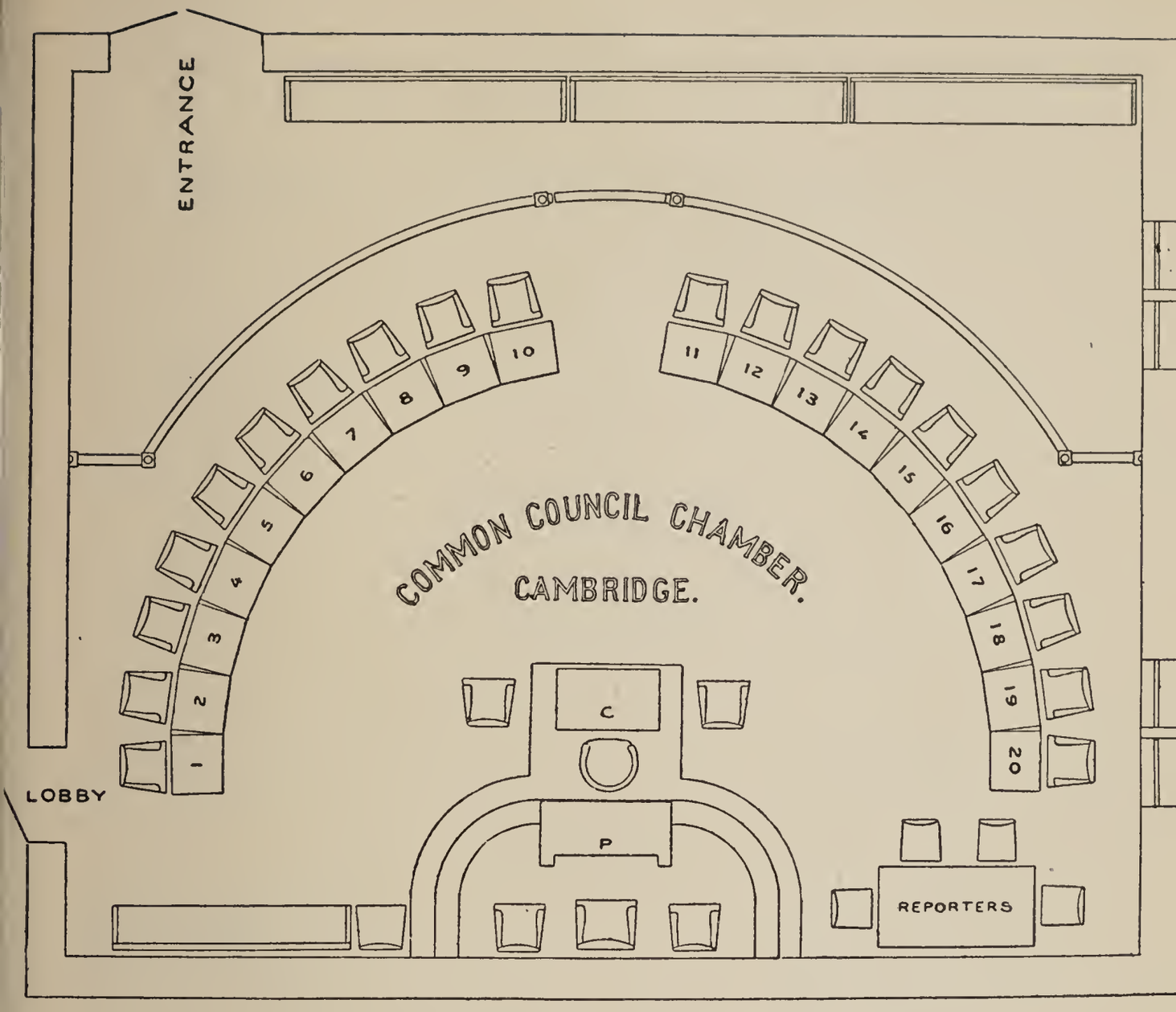
1	Alderman	Good.	6	Alderman	Carstein.
2	"	Herman Bird.	7	"	Wm. W. Bird.
3	"	Beunke.	8	"	Barrett.
4	"	Bell.	9	"	Davis.
5	"	Merrill.	10	"	Coveney.

C — Edward J. Brandon, *City Clerk.*

M — Francis L. Pratt, *City Messenger.*

Reporters:

1	John B. Whoriskey, Boston Globe.	5	Edgar L. Bean, Boston Herald.
2	Burton L. Read, Cambridge Tribune.	6	Charles Capehart, Boston Traveler.
3	Louis F. Conant, Boston Journal.	7	Walter G. Davis, Cambridge Press.
4	James H. Cox, Cambridge Times.	8	Jas. W. Bean, Cambridge Chronicle.



KEY TO COMMON COUNCIL CHAMBER

CITY HALL, CAMBRIDGE

1902

P — Thorndike Spalding, *President.*

1	Councilman	Flynn.
2	"	Colman.
3	"	Sullivan.
4	"	Dudley.
5	"	Rhoades.
6	"	Caswell.
7	"	Quinn.
8	"	Hart.
9	"	Cutting.
10	"	Bushway.
11	Councilman	Barry.
12	"	Shaughnessy.
13	"	Walcott.
14	"	Stearns.
15	"	Barnard.
16	"	Clark.
17	"	Sharkey.
18	"	Lake.
19	"	Dyer.
20	Vacant.	

C — Edward A. Counihan, *Clerk.*

Frank T. Evans, *Page.*

Reporters:

J. Lee Robinson, { Cambridge Chronicle. Cambridge Press.

Edward F. Gamwell, Cambridge Tribune.
John S. O'Brien, Cambridge Times.

GOVERNMENT OF THE CITY OF CAMBRIDGE, 1902

Mayor

HON. JOHN H. H. McNAMEE, 50 Mt. Vernon Street.

Board of Aldermen

President.

JAMES F. AYLWARD.

Ward One.

STOUGHTON BELL	164 Brattle Street.
JOHN D. MERRILL	12 Mt. Auburn Street.

Ward Two.

JAMES F. AYLWARD	143 Prospect Street.
HERMAN BIRD	12 Bigelow Street.
WILLIAM W. BIRD	185 Hancock Street.
WILLIAM R. DAVIS	349 Broadway.

Ward Three.

JAMES T. BARRETT	8 Parnell Street.
JOHN W. COVENEY	140 Otis Street.

Ward Four.

FRED L. BEUNKE	225 Franklin Street.
TIMOTHY W. GOOD	26 Pleasant Street.

Ward Five.

HANS L. CARSTEIN	45 Cogswell Avenue.

Clerk.

EDWARD J. BRANDON.

Messenger.

FRANCIS L. PRATT.

Regular Meetings on Tuesday Evenings at 8 o'clock.

Common Council

President.

THORNDIKE SPALDING.

Ward One.

CHARLES H. LAKE	362 Harvard Street.
THORNDIKE SPALDING	75 Sparks Street.
HARRY N. STEARNS	64 Walker Street.
CHARLES WALCOTT	85 Sparks Street.

Ward Two.

J. EDWARD BARRY	347 Broadway.
HARLEIGH J. BUSHWAY	42 Fayette Street.
MICHAEL H. FLYNN	86 Cherry Street.
JAMES F. QUINN	122 Willow Street.
HERBERT A. RHOADES	26 Inman Street.
JOSEPH E. SHARKEY	259 Elm Street.

Ward Three.

JOHN T. HART	72 Fourth Street.
DANIEL B. SHAUGHNESSY, JR.	276 Cambridge Street.
ALEXANDER J. SULLIVAN	240 Third Street.

Ward Four.

SOLOMON H. BARNARD	234 Allston Street.
GEORGE B. CASWELL	27 River Street.
EDWARD E. CLARK	346 Brookline Street.
EDWIN A. CUTTING	419 Putnam Avenue.

Ward Five.

WILLIAM H. COLMAN	13 Reed Street.
HOWLAND DUDLEY	24 Avon Hill Street.
JOHN L. DYER	25 Mt. Pleasant Street.

Clerk.

EDWARD A. COUNIHAN.

Page.

FRANK T. EVANS.

Regular Meetings on Tuesday Evenings at 8 o'clock.

COMMITTEES OF THE CITY COUNCIL

JOINT STANDING COMMITTEES OF THE CITY COUNCIL.

Accounts. Aldermen Beunke and Herman Bird; Councilmen Sharkey, Quinn and Barnard.

Assessors' Department. Alderman Herman Bird; Councilmen Shaughnessy and Caswell.

City Engineering. Aldermen Barrett and Good; Councilmen Caswell, Flynn and Dyer.

Cambridge City Home. Aldermen Carstein and Good; Councilmen Flynn, Sullivan and Caswell.

Claims. President Aylward and Aldermen Beunke, Wm. W. Bird and Bell; President Spalding, Councilmen Cutting, Sharkey, Hart, Walcott and Dyer.

Finance. President Aylward and Aldermen Carstein, Merrill and Coveney; President Spalding, Councilmen Rhoades, Clark, Shaughnessy, Lake and Dudley.

Fire Department. Aldermen Davis and Beunke; Councilmen Sullivan, Barry and Barnard.

Health. Aldermen Herman Bird and Coveney; Councilmen Rhoades, Lake and Walcott.

Highways. Aldermen Barrett, Carstein and William W. Bird; Councilmen Lake, Barry, Colman and Hart.

Legislative Matters. President Aylward and Aldermen Herman Bird, Davis and Merrill; President Spalding, Councilmen Clark, Rhoades, Hart, Stearns and Dyer.

Ordinances. Aldermen Bell and William W. Bird; Councilmen Dudley, Shaughnessy and Stearns.

Parks. Aldermen Good and Davis; Councilmen Cutting, Sharkey and Hart.

Printing. Aldermen Beunke and Merrill; Councilmen Quinn, Barnard and Flynn.

Public Instruction. Aldermen William W. Bird and Beunke; Councilmen Dudley, Cutting and Flynn.

Public Property. Aldermen Good and Bell; Councilmen Barry, Colman and Stearns.

Rules and Orders. Aldermen Merrill and Carstein; Councilmen Clark, Sullivan and Flynn.

Water Supply. Aldermen Merrill and William W. Bird; Councilmen Bushway, Caswell and Quinn.

Wires and Lamps. Aldermen Davis and Barrett; Councilmen Colman, Bushway and Barry.

STANDING COMMITTEES OF THE BOARD OF ALDERMEN.

Bonds. Aldermen Herman Bird, Beunke and Bell.

Claims. President Aylward, and Aldermen Beunke, Wm. W. Bird and Bell.

Elections and Returns. Aldermen Wm. W. Bird, Merrill and Bell.

Fire Department. Aldermen Davis, Beunke and Merrill.

Health. Aldermen Herman Bird, Coveney and William W. Bird.

Highways. Aldermen Barrett, Carstein and William W. Bird.

Licenses. Aldermen Carstein, Good and Barrett.

Parks. Aldermen Good, Davis and Barrett.

Police. Aldermen Beunke, Davis and Good.

Rules and Orders. Aldermen Merrill, Carstein and Coveney.

Sewers. Aldermen Barrett, Davis and Good.

Soldiers' Aid. Aldermen Carstein, Herman Bird, Beunke, Barrett and Bell.

Street Railways. Aldermen Davis, Good and Herman Bird.

STANDING COMMITTEES OF THE COMMON COUNCIL.

Bills in the Second Reading. Councilmen Flynn, Barnard and Colman.

Elections and Returns. Councilmen Quinn, Sharkey and Caswell.

Enrolled Ordinances. Councilmen Walcott, Dyer and Bushway.

JOINT SPECIAL COMMITTEES.

Consideration of Matters Referred from Last City Council. Aldermen Carstein, Good and Bell; Councilmen Sharkey, Sullivan, Dudley, Stearns and Cutting.

Recommendations in Mayor's Inaugural Address. Aldermen Coveney and Davis; Councilmen Shaughnessy, Clark and Sharkey.

Municipal Bath House. Aldermen Good, Beunke and Merrill; Councilmen Sullivan, Cutting, Dyer, Walcott and Bushway.

New Cambridge Bridge. Aldermen Beunke and Herman Bird; Councilmen Barnard, Bushway and Quinn.

Amendments to City Charter. President Aylward and Aldermen Coveney, Carstein and Merrill. President Spalding, Councilmen Rhoades, Clark, Shaughnessy, Lake and Dudley.

Rapid Transit. President Alyward and Aldermen Carstein, Bell and William W. Bird; President Spalding and Councilmen Sharkey, Dudley, Sullivan, Lake and Barnard.

Land Values. Aldermen Herman Bird and Barrett; Councilmen Stearns, Rhoades and Caswell.

SPECIAL COMMITTEES OF BOARD OF ALDERMEN.

Consideration of Matters Referred from the Last Board of Aldermen. Aldermen Carstein, William W. Bird and Bell.

Jury List. Aldermen Davis and Beunke.

MEMBERS OF THE CITY COUNCIL, WITH THE COMMITTEES UPON WHICH THEY HAVE BEEN APPOINTED.

ALDERMEN.

President Aylward. Claims, Finance, Legislative Matters, Amendments to City Charter, Rapid Transit.

Alderman Barrett. City Engineering, Highways, Wires and Lamps, Licenses, Parks, Sewers, Soldiers' Aid, Land Values.

Alderman Bell. Claims, Ordinances, Public Property, Bonds, Election Returns, Soldiers' Aid, Matters referred from last City Council, Matters referred from last Board of Aldermen, Rapid Transit.

Alderman Beunke. Accounts, Claims, Fire Department, Police, Printing, Public Instructions, Bonds, Soldiers' Aid, Municipal Bath House, New Cambridge Bridge, Jury List.

Alderman Herman Bird. Accounts, Assessors' Department, Health, Legislative Matters, Bonds, Soldiers' Aid, New Cambridge Bridge, Street Railways, Land Values.

Alderman W. W. Bird. Claims, Highways, Ordinances, Public Instruction, Water Supply, Elections and Returns, Health, Matters referred from last Board of Aldermen, Rapid Transit.

Alderman Carstein. City Home, Finance, Highways, Rules and Orders, Licenses, Soldiers' Aid, Matters referred from last City Council. Amendments to City Charter, Matters referred from last Board of Aldermen, Rapid Transit.

Alderman Coveney. Finance, Health, Rules and Orders, Recommendations in Mayor's Inaugural, Amendments to City Charter.

Alderman Davis. Fire Department, Legislative Matters, Parks, Wires and Lamps, Police, Sewers, Street Railways, Recommendations in Mayor's Inaugural, Jury List.

Alderman Good. City Engineering, City Home, Parks, Public Property, Licenses, Police, Sewers, Street Railways, Matters referred from last City Council, Municipal Bath House.

Alderman Merrill. Finance, Legislative Matters, Printing, Rules and Orders, Water Supply, Elections and Returns, Fire Department, Municipal Bath House, Amendments to City Charter.

COMMON COUNCILMEN.

President Spalding. Claims, Finance, Legislative Matters, Amendments to City Charter, Rapid Transit.

Councilman Barnard.—Accounts, Fire Department, Printing, Bills in Second Reading, New Cambridge Bridge, Rapid Transit.

Councilman Barry. Fire Department, Highways, Public Property, Wires and Lamps.

Councilman Bushway. Water Supply, Wires and Lamps, Enrolled Ordinances, Municipal Bath House, New Cambridge Bridge.

Councilman Caswell. Assessors' Department, City Engineering, City Home, Water Supply, Elections and Returns, Land Values.

Councilman Clark. Finance, Legislative Matters, Rules and Orders, Recommendations in Mayor's Inaugural, Amendments to City Charter.

Councilman Colman.—Highways, Public Property, Wires and Lamps, Bills in Second Reading.

Councilman Cutting. Claims, Parks, Public Instruction, Matters referred from last City Council, Municipal Bath House.

Councilman Dudley. Finance, Ordinances, Public Instruction, Matters referred from last City Council, Amendments to City Charter, Rapid Transit.

Councilman Dyer. City Engineering, Claims, Legislative Matters, Enrolled Ordinances, Municipal Bath House.

Councilman Flynn. City Engineering, City Home, Printing, Public Instruction, Rules and Orders, Bills in Second Reading.

Councilman Hart. Claims, Highways, Legislative Matters, Parks.

Councilman Lake. Finance, Health, Highways, Amendments to City Charter, Rapid Transit.

Councilman Quinn. Accounts, Printing, Water Supply, Elections and Returns, New Cambridge Bridge.

Councilman Rhoades.—Health, Legislative Matters, Amendments to City Charter, Land Values.

Councilman Sharkey. Accounts, Claims, Parks, Elections and Returns, Matters referred from last City Council, Recommendations in Mayor's Inaugural, Rapid Transit.

Councilman Shaughnessy. Assessors' Department, Finance, Ordinances, Recommendation in Mayor's Inaugural, Amendments to City Charter.

Councilman Stearns. Legislative Matters, Ordinances, Public Property, Matters referred from last City Council, Land Values.

Councilman Sullivan. City Home, Fire Department, Rules and Orders, Matters referred from last City Council, Municipal Bath House, Rapid Transit.

Councilman Walcott. Claims, Health, Enrolled Ordinances, Municipal Bath House.

DEPARTMENTS AND BOARDS

EXECUTIVE DEPARTMENT.

JOHN H. H. MCNAMEE . . . *Mayor.*
Edward A. Counihan . . *Mayor's Clerk.*
Office Hours: 8 A. M. to 4 P. M.
Office, Rooms 17 and 18, City Hall. Telephone 463.

CITY CLERK DEPARTMENT.

EDWARD J. BRANDON . . . *City Clerk.*
Albert M. Pear . . . *Assistant City Clerk.*
Office Hours: 8 A. M. to 4 P. M.
Office, Rooms 8 and 9, City Hall. Telephone 419.

TREASURY DEPARTMENT.

WILLIAM W. DALLINGER, *City Treasurer and Collector of Taxes.*
Office Hours: 8 A. M. to 2 P. M.
Office, Rooms 3 and 4, City Hall. Telephone 602.

AUDITING DEPARTMENT.

HARRY T. UPHAM . . . . *City Auditor.*
Office Hours: 8 A. M. to 4 P. M.
Office, Rooms 1 and 2, City Hall. Telephone 602.

CLERK OF COMMITTEES DEPARTMENT.

JOHN MCDUFFIE . . . . *Clerk of Committees.*
Office Hours: 8 A. M. to 4 P. M.
Office, Room 16, City Hall. Telephone 818.

CITY MESSENGER DEPARTMENT.

FRANCIS L. PRATT . . . *City Messenger.*
Office Hours: 8 A. M. to 5 P. M.
Office, Room 11, City Hall. Telephone 507.

LAW DEPARTMENT.

GILBERT A. A. PEVEY . . . *City Solicitor.*

Office Hours (at City Hall): Saturdays, 8 A. M. to 12 M.

Office, Room 17, City Hall. Telephone 463.

Boston Office, 22 Pemberton Square. Telephone 1071 Haymarket.

ENGINEERING DEPARTMENT.

LEWIS M. HASTINGS . . . . *City Engineer.*

Theodore L. Pike . . . *Supt. of Sewers.*

Office Hours: 8 A. M. to 5 P. M.

Office, Rooms 30 and 31, City Hall. Telephone 471.

FIRE DEPARTMENT.

THOMAS J. CASEY . . . . *Chief.*

Nathaniel W. Bunker . . *Assistant Chief.*

Office Hours: 9 to 10 A. M.

Office, Room 23, City Hall. Telephone 507.

INSPECTION, ETC., OF BUILDINGS DEPARTMENT.

WILLIAM H. GRAY, *Supt. of Public Buildings and Inspector of Buildings.*

Office Hours: 8 A. M. to 4 P. M.

Office, Room 28, City Hall. Telephone 125.

HEALTH DEPARTMENT — BOARD OF HEALTH.

E. EDWIN SPENCER, M. D. . . *Chairman.*

Term, three years.

William Rodman Peabody . . Term expires 1902.

Charles Harris . . . . . Term expires 1903.

E. Edwin Spencer, M. D. . . . Term expires 1904.

James B. Soper . . . . *Clerk.*

Edwin Farnham, M. D. . . . *Medical Inspector.*

Office Hours: 8 A. M. to 4 P. M.

Rooms 25 and 26, City Hall. Telephone 345.

POLICE DEPARTMENT.

LOTHROP J. CLOYES . . . . *Chief of Police.*

Office Hours: 8 A. M. to 6 P. M.

Office at Central Square Building. Telephone 423.

STREET DEPARTMENT.

CHARLES A. BROWN . . . *Supt. of Streets.*

Office Hours: 8 A. M. to 4 P. M.

Office, Room 12, City Hall. Telephone 435.

INSPECTION OF MILK AND VINEGAR DEPARTMENT.

PHILIP P. SHARPLES . . . { *Inspector of Milk.* / *Inspector of Vinegar.*

Office Hours: Mondays, Wednesdays and Fridays, 9.30 to 11.30 A. M.

Office, Room 27, City Hall. Telephone 345.

ASSESSORS' DEPARTMENT — BOARD OF ASSESSORS.

Term, three years.

JOSHUA G. GOOCH, *Chairman* . .	Term expires 1902.
JOHN M. DAVIS, *Secretary* . .	Term expires 1903.
DANIEL B. SHAUGHNESSY . .	Term expires 1904.

ASSISTANT ASSESSORS.

Ward 1	Warren Ivers.
Ward 2	George H. Munroe.
Ward 3	
Ward 4	Edward A. Barnard.
Ward 5	Henry E. Farrington.

Office Hours: 8 A. M. to 4 P. M.

Office, Rooms 21 and 22, City Hall. Telephone 244.

CITY ELECTRICAL DEPARTMENT.

CHARLES F. HOPEWELL : . . *City Electrician.*

Office Hours: 8 A. M. to 4 P. M.

Office, Room 28, City Hall. Telephone 125.

INSPECTION OF ANIMALS DEPARTMENT.

CHARLES E. HADCOCK, M. D. V. . *Inspector of Animals.*
Residence, 25 Dana Street. (No office or hours.)

BRIDGE DEPARTMENT.

WILLIAM J. MARVIN, *Bridge Commissioner and Harbor Master.*
Residence, 58 Trowbridge Street. (No office or hours.)

SEALER OF WEIGHTS AND MEASURES DEPARTMENT.

A. SHERBURNE K. CLARK . *Sealer of Weights and Measures.*
Office Hours: { Fridays, 8 A. M. to 4 P. M.
Saturdays, 8 A. M. to 12 M.
Office, Brattle Square Building. Telephone 35.

CITY PHYSICIAN.

LEWIS L. BRYANT.
Residence, 930 Massachusetts Avenue. Telephone 522-2.
Office, Central Square Building.

FENCE VIEWERS.

Lewis M. Hastings . . . . City Hall.
William H. Gray . . . . City Hall.
Telephones, 471, 125.

SCHOOL COMMITTEE.

JOHN H. H. MCNAMEE, Mayor . *Chairman, ex-officio.*
Term, three years.

Ward One.

Paul H. Hanus . . . . Term expires 1902.
William Taggard Piper . . . Term expires 1903.
Charles H. Thurston . . . Term expires 1904.

Ward Two.

J. Henry Russell . . . . Term expires 1902.
Caroline L. Edgerly . . . . Term expires 1903.
George W. Bicknell . . . . Term expires 1904.

Ward Three.

Edward B. Malley	Term expires 1902.
Philip M. Fitzsimmons	Term expires 1903.
Robert Walker	Term expires 1904.

Ward Four.

Mary E. Mitchell	Term expires 1902.
Charles F Wyman	Term expires 1903.
Sherman R. Lancaster	Term expires 1904.

Ward Five.

William J. Mandell	Term expires 1902.
Carolyn P. Chase	Term expires 1903.
Arthur P. Stone	Term expires 1904.

Secretary and School Supply Agent.

Sanford B. Hubbard.

Superintendent of Schools.

Francis Cogswell.

Office Hours: 8.30 A. M. to 5 P. M.

Office, Rooms 13, 14 and 15, City Hall. Telephone 445.

CEMETERY DEPARTMENT — CEMETERY COMMISSIONERS.

George S. Saunders — *Chairman.*

Term, three years.

William A. Bertsch	Term expires 1903.
Charles O. Welch	Term expires 1903.
Nathan C. Lombard	Term expires 1904.
James H. Burns	Term expires 1904.
Herbert A. Chase	Term expires 1905.
George S. Saunders	Term expires 1905.

Edward J. Brandon — *Clerk of the Board.*

Office, Rooms 8 and 9, City Hall. Telephone 419.

Charles S. Childs — *Supt. of Cemetery.*

Office Hours: at Cemetery, 8 A. M. to 5 P. M.

Office at Cemetery on Coolidge Avenue. Telephone 289-3.

PERSONS TO CAUSE TO BE PROPERLY INTERRED THE BODIES OF SOLDIERS AND SAILORS.

John Donelan. William H. Eveleth.
Eben W. Pike. Edward J. Brandon.

PUBLIC LIBRARY DEPARTMENT — TRUSTEES OF CAMBRIDGE PUBLIC LIBRARY.

William Taggard Piper . . *President.*

For one year.

William T. Piper of School Committee.

Citizens at large. Term, three years.

Eugene A. McCarthy . . .	Term expires 1903.
William J. Rolfe	Term expires 1903.
Thomas W. Higginson . . .	Term expires 1904.
Edward C. Wheeler	Term expires 1904.
Albert M. Barnes	Term expires 1905.
John H. Hurley	Term expires 1905.

William L. R. Gifford . . . *Secretary and Treasurer.*
William L. R. Gifford . . . *Librarian.*

Library Open: 10 A. M. to 8 P. M.
Reading Room: 10 A. M. to 10 P. M.
Sunday, 2 to 10 P. M.
Office at Library Building, Broadway, Irving, and Trowbridge Streets.
Telephone 610.

WATER WORKS DEPARTMENT — CAMBRIDGE WATER BOARD.

William B. Durant. . . . *President.*

Term, five years.

Stillman F. Kelley	Term expires 1902.
Wellington Fillmore	Term expires 1903.
Edmund H. Stevens	Term expires 1904.
George H. Howard	Term expires 1905.
William B. Durant	Term expires 1906.

Walter H. Harding . . . . *Clerk of the Board.*
Edwin C. Brooks . . . . *Supt. of Water Works.*
Walter H. Harding . . . . *Water Registrar.*

Office Hours; 8 A. M. to 4 P. M.
Office, Rooms 5 and 6, City Hall. Telephone 430.

REGISTRARS OF VOTERS.

Frederick W. Macdonald . . *Chairman.*

Term, four years.

Frederick W. Macdonald . . .	Term expires 1902.
C. Burnside Seagrave	Term expires 1903.
John P. McCormick	Term expires 1904.
Isaac S. Pear	Term expires 1905.

Isaac S. Pear . . . . . *Clerk.*

Office, Central Square Building.

PARK DEPARTMENT — PARK COMMISSIONERS.

George Howland Cox . . . *President.*

Term, three years.

William M. Richardson . . .	Term expires 1902.
Edmund Reardon	Term expires 1903.
George Howland Cox . . .	Term expires 1904.

Howard E. Whiting, *Clerk of the Board and General Superintendent.*

Office Hours: 8 A. M. to 4 P. M.

Office, Room 10, City Hall. Telephone 650.

SINKING FUND DEPARTMENT — COMMISSIONERS OF THE SINKING FUNDS.

Frank A. Allen . . . . *Chairman.*

Term, three years.

John C. Bullard	Term expires 1902.
George H. Howard	Term expires 1902.
Andrew J. Lovell	Term expires 1903.
J. Henry Russell	Term expires 1903.
Frank A. Allen	Term expires 1904.
Dana W. Hyde	Term expires 1904.

John McDuffie . . . . . *Secretary.*

William W. Dallinger . . . *Treasurer.*

OVERSEERS OF THE POOR DEPARTMENT — OVERSEERS OF THE POOR.

Charles Walker . . . . *Chairman.*

Term, five years.

Alexander Millan . . . . Term expires 1903.
Patrick Crowley . . . . Term expires 1904.
Charles Bullock . . . . Term expires 1905.
Charles Walker . . . . Term expires 1906.
Jeremiah Crowley . . . . Term expires 1907.

David P. Muzzey . . . . *Secretary.*
Harold K. Estabrook . . . *Visitor.*

Martin L. Eldridge, *Superintendent of City Home.*

Office Hours (at Central Square Building): 8 A. M. to 4 P. M.

Telephones: { Office, 660. / City Home, 189.

BOARD OF SURVEY.

James A. Wood . . . . *Chairman.*

Term, three years.

Edwin D. Mellen . . . . Term expires 1903.
James A. Wood . . . . Term expires 1904.
William E. Doyle . . . . Term expires 1905.

John McDuffie . . . . *Secretary.*

TRUSTEES OF THE DOWSE INSTITUTE.

Frank A. Allen . . . . *President.*

John H. H. McNamee . . . *Mayor, ex-officio.*
Thorndike Spalding, *President of Common Council, ex-officio.*
George Howland Cox . . . Willard A. Bullard.

Frank A. Allen.

George Howland Cox . . . *Secretary.*

TRUSTEES OF THE { SANDERS TEMPERANCE FUND. / BRIDGE CHARITABLE FUND.

John H. H. McNamee, Mayor, James F. Aylward, President of Board of Aldermen, Thorndike Spalding, President of Common Council,

Ex-officiis.

POLICE DEPARTMENT.

Chief of Police.

LOTHROP J. CLOYES.

Deputy Chief.

WILLIAM F. BATCHELDER.

Clerk.

CHARLES W. PRIEST.

Captains of Police.

DISTRICT I.	DISTRICT II.	DISTRICT III.
MARK J. FOLSOM.	FRED. B. PULLEN.	JOHN F. MURRAY.

Chief Inspector.

Capt. JAMES E. MURRAY.

Assistant Inspector.

Lieut. HENRY C. JONES.

Sergeants of Police.

DISTRICT I.	DISTRICT II.	DISTRICT III.
DANIEL CALLAHAN.	JAMES S. ALEXANDER.	CHARLES L. PIKE.
DAVID A. STEVENS.	MICHAEL J. CONRY.	WILLIAM MULLETT.

Patrolmen.

(With Badge and Hat Numbers.)

DISTRICT I.

No. of Badge		Hat No.	No. of Badge.		Hat No.
60	Aberle, Charles F.	143	88	Mahoney, George J.	148
98	Aberle, William H.	142	44	Marston, Charles C.	130
7	Barrington, George T.	107	55	Maloy, John P.	126
28	Belcher, Edward F.	128	10	McBride, John J.	110
53	Blen, Elbridge S.	113	27	McCann, Charles J.	141
69	Brennan, Michael J.	131	1	McCrehan, John E.	101
20	Corcoran, Timothy,	120	96	McFadden, Richard M.	145
25	Comerford, Edward J.	125	18	McNulty, James E.	118
66	Cox, James A.	119	45	Murray, Patrick F.	133
40	Doyle, Patrick	112	85	Presho, Charles H.	109
8	Furbush, Joseph H.	108	83	Rice, Ralph R.	136
2	Graves, William H.	102	62	Roper, Bernard J.	134
49	Hiscock, Simon D.	140	21	Smyth, George	121
47	Hixon, Robert T.	104	24	Temple, Joseph C.	124
58	Holt, James H. H.	111	42	Wells, John H.	114
17	Jewett, Dexter	117	80	Welch, Edward J.	127
32	Keaney, James M.	132	3	White, Orrin B.	103
35	Ladd, Fred L.	135	48	Winslow, John E.	115
67	Leahy, Denis F.	105	79	Wyman, Charles W.	137
91	Leahy, Timothy F.	139			

DISTRICT II.

No. of Badge.		Hat No.	No. of Badge		Hat No.
51	Aylward, Richard H.	233	16	McCabe, Edward J.	228
56	Coulter, John	203	72	McCaffrey, Bernard	215
34	Culhane, Michael	216	26	McElroy, James L.	226
68	Deehan, John W.	202	15	McKeown, William	230
50	Dynan, Thomas F.	222	64	McMennimen, William H.	218
86	Ellis, Frederick M.	232	43	Mullen, Robert E.	210
38	Ginty, Michael A.	209	4	Neilon, Michael	204
81	Gordon, Herbert	211	89	Parks, Joseph W.	205
41	Griffiths, John J.	225	59	Real, Thomas J.	229
82	Hackett, Mortimer M.	208	70	Robinson, Fred A.	217
77	Hezlitt, John A.	221	31	Robertson, William H.	231
14	Higgins, Benjamin F.	214	73	Rowe, Thomas P.	220
95	Hill, William H.	236	78	Rowe, William H.	201
33	Howe, William H. H.	212	65	Shaughnessy, John E.	206
23	Law, Frederick W.	223	61	Sullivan, Cornelius	227

DISTRICT III.

No. of Badge.		Hat No.	No. of Badge.		Hat No.
5	Apel, Frederick	305	39	McCorry, Joseph F.	304
22	Campbell, Thomas M.	322	76	Mullins, William N.	306
71	Counihan, Daniel F.	312	75	Mulvaney, Simon J.	318
36	Dunlea, Patrick F.	136	93	Neilon, John P.	323
74	Forristall, James B.	302	19	Scully, Benjamin C.	307
9	Hall, James P.	309	46	Scobey, Frank W.	301
37	Hurley, Patrick F.	310	63	Skelley, John W.	308
87	Kelleher, John	313	57	Walsh, David H.	316
30	McCarthy, Jeremiah	314			

Reserve Officers.

No. of Badge.		Hat No.	No. of Badge.		Hat No.
11	Horrigan, Edward F.	234	29	LaMarche, Frank D.	237
94	Diehl, Antone B.	315	101	Blanchard, Ernest E.	122
92	Walsh, David L.	149	102	Canney, John J.	302
6	Roberts, John W.	235	103	Kelley, Michael J.	249
54	Bradley, Charles E.	116	105	Davis, Harry W.	319

Drivers of Patrol Wagons.

DISTRICT II.

John T. Cook.
John McCauley.

DISTRICT III.

John Sullivan.
John Coffey.

Ambulance Drivers.

Dow, Warren H. Sherman, George E.

Matrons.

Mrs. E. S. Haines. Mrs. A. M. Stearns.

Keeper of Lock-ups.

Lothrop J. Cloyes.

Person to receive Information of Damages by Dogs.

(Ch. 454, Acts 1889.)

Lothrop J. Cloyes.

TRUANT OFFICERS.

Lucian S. Cabot. William H. Porter.
John Carmichael. Thomas F. Riley.

CONSTABLES.

(Without power to serve civil process.)

Thomas F. Burke, 259 Mt. Auburn street,
A. Sherburne K. Clark, City Building, Brattle square
John P. Conroy, 3 Willard street court,
Joseph J. Donahue, 94 Berkshire street,
Charles E. Goodrow, 1 Eustis street,
Eli L. Goodrow, 114 Oxford street,
Frank A. Hagar, 18 St. Paul street,
Joseph James, 40 Bismarck street,
John A. Jackson, 202 Green street,
Francis A. McLaughlin, 177 Windsor street,
Daniel J. Mills, 2 Emmons place,
Peter J. Murphy, 140 Mt. Auburn street,
David J. Nelligan, 17 Montgomery street,
Daniel W. Parker, 101 Western avenue,
George A. Patten, 10 Warren street,
Leander Sampson, 27 Magnolia avenue,
John Taylor, 220 Norfolk street,
Frank H. Wait, 168 Spring street,

CONSTABLES.

(With power to serve civil process.

David J. Barry, Jr., 146 Rindge avenue,
James A. Brown, 106 Sixth street,
John Foster, 83 Plympton street,
Joseph Fox, 36 Walker street,

James E. Lennon, 141 Pearl street,
John T. Lynch, 169 Windsor street,
John J. Rafferty, 71 Tremont street,
Frank E. Shaw, 440 Cambridge street,
Arthur M. Stewart, 199 Hamilton street,
John H. Tukey, 66 Cambridge street.

UNDERTAKERS.

David F. Corcoran.
John W. Coveney.
Daniel P. Danehy.
Edwin L. Derby.
Arthur S. Fudge.
David Fudge.
Edward J. Fudge.
Fred L. Hutchins.
George H. Kelley.
Horace D. Litchfield.
Judson Litchfield.
C. Henry Lockhart.
Abiel E. Long.
George W. Long.
James F. Mullen.
John J. Murphy.
William N. Neally.
David J. Nelligan.
T. Louis O'Brien.
John J. Ross.
Daniel P. Shea.
James J. Shea.
John T. Shea.
Michael J. Shea.
John W. Skelley, Jr.
Ralph Smith.
William F. Stearns.
William Stinson.
William A. Taylor.
Benjamin F. Wyeth.
Henry A. Wyeth.

AUCTIONEERS.

John J. Ahern.
Wilbur S. Clarke.
John W. Coveney.
Patrick Crowley.
Henry J. Cunningham.
Watson G. Cutter.
Jeremiah F. Donovan.
William R. Ellis.
William L. Frankenstein.
Leander M. Hannum.
Edward R. Harris.
Stephen H. Harrington.
J. Lewis Hayden.
Frank L. Howe.
F. Louis John.
William Kelley.
Samuel R. Knights.
Frank H. Lambert.
Louis Lemon.
James E. Lennon.
John T. Lynch.
John W. Mahady.
Henry L. Marcy.
Cornelius J. McArthur.
John B. McKenna.
Charles L. Phillips.
Thomas C. Scottron.
Frank E. Shaw.
Fred W. Sleeper.
Thomas W. Spencer.
Rolla E. Stockton.
Francis Traynor.
Charles J. Walker.
Walter C. Wardwell.

FIELD DRIVERS.

Charles F. Aberle.
William H. Aberle.
Richard H. Alyward.
Frederick Apel.
George T. Barrington.
Edward F. Belcher.
Ernest E. Blanchard.
Elbridge S. Blen.
Charles E. Bradley.
Michael J. Brennan.
Thomas F. Burke.
Thomas M. Campbell.
John J. Canney.
John P. Conroy.
Timothy Corcoran.
James A. Cox.
John Coulter.
Michael Culhane.
Edward J. Comerford.
Daniel F. Counihan.
Harry W. Davis.
Antone B. Deihl.
John W. Deehan.
Joseph J. Donahue.
Patrick Doyle.
Patrick F. Dunlea.
Thomas F. Dynan.
Frederick M. Ellis.
James B. Forristall.
Joseph H. Furbush.
Michael A. Ginty.
Herbert Gordon.
William H. Graves.
John J. Griffiths.
Mortimer M. Hackett.
James P. Hall.
John A. Hezlitt.
Benjamin F. Higgins.
William H. Hill.
Simon D. Hiscock.
Robert T. Hixon.
James H. H. Holt.
Edward F. Horrigan.
William H. H. Howe.
Patrick F. Hurley.
Dexter Jewett.
James M. Keaney.
John Kelleher.
Fred L. Ladd.
Frank D. La Marche.
Frederick W. Law.
Dennis F. Leahy.
Timothy F. Leahy.
George J. Mahoney.
Charles C. Marston.
John P. Maloy.
Edward J. McCabe.
BernardMcCaffrey.
John J. McBride.
Joseph F. McCorry.
Jeremiah McCarthy.
John E. McCrehan.
Charles J. McCann.
James L. McElroy.
Richard M. McFadden.
William F. McKeown.
Francis A. McLaughlin.
William H. McMennimen.
James E. McNulty.
Robert E. Mullen.
William N. Mullins.
Simon J. Mulvaney.
Peter J. Murphy.
Patrick F. Murray.
John P. Neilon.
Michael Neilon.
Joseph W. Parks.
George A. Patten.
Charles H. Presho.
Charles W. Priest.

Thomas J. Real.
Ralph R. Rice.
Bernard J. Roper.
Frederick A. Robinson.
William H. Robertson.
John W. Roberts.
Thomas P. Rowe.
William H. Rowe.
Frank W. Scobey.
Benjamin C. Scully.
John E. Shaughnessy.
John W. Skelley.
George Smyth.
Cornelius Sullivan.
Joseph C. Temple.
David H. Walsh.
David L. Walsh.
Edward J. Welch.
John H. Wells.
Orrin B. White.
Charles W. Wyman.

MEASURERS OF WOOD AND BARK.

Ernest P. Cook.
Orville R. Cooper.
Herbert T. Lawrence.
Robert A. Parry.
David C. Proudfoot.
Joseph P. Quilty.
George Stephens.

POUND KEEPER.

Robert Holden.

COMMITTEE FOR THE PRESERVATION OF FISH.

Edwin C. Brooks. Theodore L. Pike. Lewis M. Hastings.

WEIGHERS OF COAL.

Clarence G. Bartlett.
Preston L. Berry.
George L. Brogan.
Silas E. Buck.
Hans L. Carstein.
James W. Coleman.
Walter G. Coleman.
Ernest P. Cook.
Orville R. Cooper.
Warren Crane.
Timothy J. Crowley.
Edward J. Dance.
Levi Fairbanks.
Edwin H. Harnden.
Lillian M. Harper.
Stanley Jennison.
Stanwood C. Mariner.
Harry W. Marston.
Daniel McCarthy.
John Moynahan.
Walter H. Nay.
Charles Pierce.
Stephen A. Prohaska.
David Proudfoot.
David C. Proudfoot.
George Richardson.
Alexander Russell.
Helena M. Schliephake.
Edward A. Smith.
Leslie M. Snow.
Thomas H. Warren.
Patrick J. White.

INSPECTORS OF JUNK SHOPS, PAWNBROKERS' SHOPS, AND SECOND HAND STORES AND DEALERS.

Mark J. Folsom.
John F. Murray.
James E. Murray.
Frederick B. Pullen.

PUBLIC WEIGHERS.

Robert C. Bird.
Ernest E. Bradbury.
Edward J. Carroll.
Isaac A. Chandler.
Wesley B. Churchill.
Edward B. Dale.
Arthur B. Dodge.
John E. Fay.
James A. Ferguson.
Alexander S. Ford.
Robert Holden.
Nathan H. Holbrook.
Edward F. Mahady.
William Maloney.
Fred W. MacFarland.
Melvin MacFarland.
John F. Reilly.
Thomas H. Shea.
John M. Thayer.
James A. Whelan.

HAY WEIGHER.

Edmund I. Train.

INSPECTOR OF PRESSED OR BUNDLED HAY OR STRAW.

Harvey O. Titus.

MEASURER OF GRAIN.

A. Sherburne K. Clark.

PERSON

To seize all baskets, measures or vessels used or intended to be used in measuring charcoal, as provided in Sect. 88, Chap. 60, P. S.

A. Sherburne K. Clark.

MEASURER AND SURVEYOR.

Henry L. Hale.

SURVEYORS OF MECHANICS' WORK.

Hosea W. Leach.
Charles A. Mason.

STATE AND CITY ELECTIONS

HELD

NOVEMBER 5, 1901, DECEMBER 12, 1901

RESPECTIVELY

VOTES CAST FOR GOVERNOR, COUNCILLOR, SENATORS, COUNTY COMMISSIONER, ASSOCIATE COMMISSIONERS, DISTRICT ATTORNEY, CLERK OF COURTS, SHERIFF, AND REPRESENTATIVES IN THE GENERAL COURT, FOR CITY OFFICERS, ON THE QUESTION OF ACCEPTING THE LAW WITH REFERENCE TO TERM OF OFFICE OF THE CITY CLERK, AND ON THE LICENSE QUESTION.

Names of Candidates.	CANDIDATES FOR GOVERNOR. Whole Number.	Michael T. Berry.	W. Murray Crane.	John B. Lewis, Jr.	Josiah Quincy.	George H. Wrenn.	Blank.	COUNCILLOR. John T. Galvin.	George A. Sanderson.	Henry D. Yerxa.	Blank.	SENATOR SECOND MIDDLESEX DIST. John A. Aitken.	Albert S. Apsey.	Edward B. James.	Scattering.	Blank.	SENATOR SECOND SUFFOLK DIST. William P. Bryant.	Maurice P. Newman.	Charles S. Sullivan.	Blank.
Ward 1, Precinct 1	297	3	168	3	108	4	11	22	75	173	27	10	169	101	1	16				
Ward 1, Precinct 2	318	7	195	7	100	1	8	21	78	196	23	10	181	107		20				
Ward 1, Precinct 3	259	8	80	1	152	4	14	34	116	73	36	14	63	158		24				
Ward 1, Precinct 4	250	2	188	2	54	2	2	8	34	188	20	4	172	60		14				
Ward 1, Precinct 5	384	2	290	4	78	1	9	16	65	285	18	9	264	95		16				
Ward 1, Totals	1,508	22	921	17	492	12	44	101	368	915	124	47	849	521	1	90				
Ward 2, Precinct 1	667	26	101	3	443	15	79	65	291	99	212	32	115	360		160				
Ward 2, Precinct 2	468	16	171	2	242	17	20	38	175	154	101	25	156	213		74				
Ward 2, Precinct 3	268	12	81	5	138	6	26	39	83	82	64	17	81	119		51				
Ward 2, Precinct 4	375	19	209	4	125	9	9	36	82	214	43	17	199	133		26				
Ward 2, Precinct 5	393	5	316	8	55	1	8	6	48	323	16	7	292	77		17				
Ward 2, Precinct 6	414	14	140	2	232	5	21	36	158	136	84	18	133	198		65				
Ward 2, Precinct 7	563	9	332	3	196	10	13	28	141	336	58	22	304	201		36				
Ward 2, Totals	3,148	101	1,350	27	1,431	63	176	248	978	1,344	578	138	1,280	1,301		429				

Ward 3, Precinct 1	281	15	68	1	167	11	19	31	132	63	55						57	26	158	40
Ward 3, Precinct 2	332	12	85	7	196	14	18	48	128	74	82						65	43	170	54
Ward 3, Precinct 3	307	8	48		217	14	20	40	164	39	64						41	25	197	44
Ward 3, Precinct 4	219	14	46		141	7	11	32	106	41	40						37	24	132	26
Ward 3, Totals	1,139	49	247	8	721	46	68	151	530	217	241						200	118	657	164
Ward 4, Precinct 1	198	10	119	2	58	4	5	13	39	118	28	8	120	58		12				
Ward 4, Precinct 2	202	4	137	1	51	4	5	9	43	136	14	7	124	62		9				
Ward 4, Precinct 3	194	3	93	4	81	2	11	16	55	93	30	5	95	76		18				
Ward 4, Precinct 4	329	7	241	4	64	2	11	11	40	246	32	6	226	77		20				
Ward 4, Precinct 5	216	1	170	9	29	2	5	5	26	170	15	2	156	44		14				
Ward 4, Precinct 6	277	4	217	11	35	5	5	7	27	221	22	5	212	41		19				
Ward 4, Precinct 7	219	2	105	2	100	2	8	20	68	110	21	7	103	95		14				
Ward 4, Precinct 8	256	3	135	2	93	11	12	20	82	135	19	15	134	93		14				
Ward 4, Totals	1,891	34	1,217	35	511	32	62	101	380	1,229	181	55	1,170	546		120				
Ward 5, Precinct 1	342		275	5	57	3	2	2	48	285	7	4	246	74		18				
Ward 5, Precinct 2	426	12	187	7	191	5	24	17	151	202	56	6	178	202		40				
Ward 5, Precinct 3	463	8	304	6	128	7	10	19	105	295	44	10	287	141		25				
Ward 5, Precinct 4	448	17	121	5	255	6	44	41	196	112	99	14	184	213		37				
Ward 5, Totals	1,679	37	887	23	631	21	80	79	500	894	206	34	895	630		120				
Grand Totals	9,365	243	4,622	110	3,786	174	430	680	2,756	4,599	1,330	274	4,194	2,998	1	759	200	118	657	164

Names of Candidates.	CANDIDATES FOR																					
	County Commissioner.					Associate Commissioners.							District Attorney.			Clerk of Courts.				Sheriff.			
	Francis Bigelow.	Robert Lusk.	William F. Merrill.	Scattering.	Blank.	Christian Beck.	Louis Eisner.	David T. Strange.	Edward Everett Thompson.	Samuel H. Warren.	Scattering.	Blank.	Thomas F. Rooney.	George A. Sanderson.	Blank.	Theodore C. Hurd.	George F. Ritchie.	Henry A. Smith.	Blank.	John R. Fairbairn.	Francis P. Finegan.	Roscoe G. Watson.	Blank.
Ward 1, Precinct 1...	200	35	9	1	52	61	40	149	155	9		180	54	207	36	216	31	5	45	221	36	5	35
Ward 1, Precinct 2...	203	37	12		66	60	36	150	157	20		213	55	203	60	208	40	13	57	231	32	12	43
Ward 1, Precinct 3...	104	60	7		88	85	57	65	56	4		251	74	101	84	104	59	3	93	128	65	3	63
Ward 1, Precinct 4...	194	16	11		29	23	17	163	159	6		132	19	203	28	208	18	3	21	216	10	2	22
Ward 1, Precinct 5...	294	25	10		55	48	29	246	245	18		182	27	314	43	304	23	8	49	318	19	14	33
Ward 1, Totals.....	995	173	49	1	290	277	179	773	772	57		958	229	1,028	251	1,040	171	32	265	1,114	162	36	196
Ward 2, Precinct 1...	191	119	10		347	194	135	79	75	10		841	166	181	320	209	121	10	327	321	99	9	238
Ward 2, Precinct 2...	210	80	9		169	132	95	141	130	25		413	112	197	159	213	71	12	172	253	81	10	124
Ward 2, Precinct 3...	97	42	3		126	69	57	74	58	6		272	62	90	116	99	44	2	123	123	51	3	91
Ward 2, Precinct 4...	229	44	16		86	80	63	173	177	16		241	64	240	71	242	43	15	75	268	39	17	51
Ward 2, Precinct 5...	316	23	14		40	29	22	291	287	19		138	19	328	46	324	15	11	43	352	9	14	18
Ward 2, Precinct 6...	185	58	11		160	101	71	113	110	14		419	89	183	142	206	55	12	141	248	59	9	98
Ward 2, Precinct 7...	368	59	13		123	93	67	290	292	7		377	76	360	127	382	45	10	126	418	49	15	81
Ward 2, Totals.....	1,596	425	76		1,051	698	510	1,161	1,129	97		2,701	588	1,579	981	1,675	394	72	1,007	1,983	387	77	701

Ward 3, Precinct 1...	121	65	2		93	86	61	56	42	5		312	82	116	83	135	62	2	82	165	58	3	55
Ward 3, Precinct 2...	116	85	26		105	103	83	60	64	6		348	101	126	105	131	83	6	112	167	81	6	78
Ward 3, Precinct 3...	119	82	4		102	96	78	38	34	3		365	104	105	98	125	72	6	104	174	70	1	62
Ward 3, Precinct 4...	73	59	9		78	77	57	35	32	9		228	83	80	56	85	58	2	74	123	48	5	43
Ward 3, Totals.....	429	291	41		378	362	279	189	172	23		1,253	370	427	342	476	275	16	372	629	257	15	238
Ward 4, Precinct 1...	108	29	13		48	36	29	103	105	10		113	37	109	52	113	26	11	48	122	23	11	42
Ward 4, Precinct 2...	130	24	9		39	39	27	112	107	6		113	28	138	36	134	19	9	40	142	23	9	28
Ward 4, Precinct 3...	113	26	7		48	38	35	85	84	11		135	28	114	52	116	17	6	55	125	23	6	40
Ward 4, Precinct 4...	218	31	21		59	26	24	215	209	14		170	28	251	50	240	24	18	47	254	24	14	37
Ward 4, Precinct 5...	144	17	22		33	23	18	146	149	19		77	20	165	31	148	13	19	36	167	12	18	19
Ward 4, Precinct 6...	196	14	26		41	20	11	192	187	19		125	12	221	44	206	13	20	38	209	9	21	38
Ward 4, Precinct 7...	122	38	3		56	60	42	96	95	3	1	141	50	114	55	119	33	4	63	148	28	4	39
Ward 4, Precinct 8. .	146	40	12		58	61	54	106	116	12		163	55	145	56	149	36	9	62	163	38	10	45
Ward 4, Totals.....	1,177	219	113		382	303	240	1,055	1,052	94	1	1,037	258	1,257	376	1,225	181	96	389	1,330	180	93	288
Ward 5, Precinct 1...	282	12	10		38	30	25	243	228	18		140	17	295	30	296	10	11	25	298	11	10	23
Ward 5, Precinct 2...	224	63	18		121	101	69	150	155	14		363	85	222	119	233	52	11	130	250	66	16	94
Ward 5, Precinct 3...	304	46	14		99	79	54	236	227	14		316	50	325	88	319	43	11	90	336	46	10	71
Ward 5, Precinct 4..	187	81	9		171	140	105	89	89	8		465	116	178	154	192	80	9	167	223	80	7	138
Ward 5, Totals.....	997	202	51		429	350	253	718	699	54		1,284	268	1,020	391	1,040	185	42	412	1,107	203	43	326
Grand Totals	5,194	1,310	330	1	2,530	1,990	1,461	3,896	3,824	325	1	7,233	1,713	5,311	2,341	5,456	1,206	258	2,445	6,163	1,189	264	1,749

CANDIDATES FOR REPRESENTATIVES.

Names of Candidates.	1st Middlesex.			2nd Middlesex.							3rd Middlesex.			4th Middlesex.								5th Middlesex.			
	James D. Hill.	James J. Myers.	Blank.	Jeremiah F. Donovan.	Alfred C. Fuller.	Francis W. Hancock.	Hans W. Johnson.	James J. Malley.	James A. Montgomery.	Blank.	George H. Dinan.	Edward J. Martin.	Blank.	Patrick A. Berkeley.	John Driscoll.	Eben H. Goggins.	Robert Lehman.	Jules E. Loubris.	William J. Rounds.	Scattering.	Blank.	Edgar Edward Chester.	Frederick S. Deitrick.	William H. Lewis.	Blank.
Ward 1, Precinct 1..	91	186	20																						
Ward 1, Precinct 2..	90	209	19																						
Ward 1, Precinct 3..	141	93	25																						
Ward 1, Precinct 4..	52	187	11																						
Ward 1, Precinct 5..	72	300	12																						
Ward 1, Totals.....	446	975	87																						
Ward 2, Precinct 1..				372	82	21	15	232	389	223															
Ward 2, Precinct 2..				255	141	16	17	144	248	115															
Ward 2, Precinct 3..				136	88	8	9	85	125	85															
Ward 2, Precinct 4..				131	200	15	12	173	132	87															
Ward 2, Precinct 5				81	296	7	6	230	73	93															
Ward 2, Precinct 6..				206	132	15	14	154	196	111															
Ward 2, Precinct 7..				218	305	12	8	274	194	115															
Ward 2, Totals.. ...				1,399	1,244	94	81	1,292	1,357	829															
Ward 3, Precinct 1..											185	66	30												
Ward 3, Precinct 2..											154	139	39												
Ward 3, Precinct 3..											199	76	32												
Ward 3, Precinct 4..											136	59	24												
Ward 3, Totals.....											674	340	125												
Ward 4, Precinct 1..														50	48	118	5	4	109		62				
Ward 4, Precinct 2..														37	40	128	8	7	121		63				
Ward 4, Precinct 3..														67	56	102	5	7	98		53				
Ward 4, Precinct 4..														48	45	238	4	3	245		75				
Ward 4, Precinct 5..														29	31	160	5	5	155		47				
Ward 4, Precinct 6..														19	18	224	5	7	213		68				
Ward 4, Precinct 7..														82	66	110	6	8	101		65				
Ward 4, Precinct 8..														77	64	133	14	14	139	1	70				
Ward 4, Totals.....														409	368	1,213	52	55	1,181	1	503				
Ward 5, Precinct 1..																						1	96	233	12
Ward 5, Precinct 2..																						7	228	175	16
Ward 5, Precinct 3..																						9	167	267	20
Ward 5, Precinct 4..																						10	252	166	20
Ward 5, Totals.....																						27	743	841	68

CITY ELECTION

DECEMBER 12, 1901.

Votes cast for City Officers, on the License Question, and on the Question of Term of Office of City Clerk.

Ward and Precinct.	Mayor.							Assessor.					
	Whole Number.	John A. Aitken.	David T. Dickinson.	John W. Ducharme.	John H. H. McNamee.	Scattering.	Blank.	John J. Ahern.	Peter P. Bleiler.	Jonas F. Capelle.	Andrew J Green.	Daniel B. Shaughnessy.	Blank.
Ward 1, Precinct 1	380	3	205	3	155	1	13	58	134	19	27	110	32
Ward 1, Precinct 2	391	3	221	2	152		13	59	140	16	25	104	47
Ward 1, Precinct 3	403	4	91	6	291		11	115	50	15	5	161	57
Ward 1, Precinct 4	274		201	2	65		6	25	119	27	24	45	34
Ward 1, Precinct 5	431	3	320	2	94		12	31	226	36	25	71	42
Ward 1, Totals....	1,879	13	1,038	15	757	1	55	288	669	113	106	491	212
Ward 2, Precinct 1	715	6	99	11	575		24	142	53	19	14	401	86
Ward 2, Precinct 2	462	8	170	6	272	1	5	74	90	32	18	191	57
Ward 2, Precinct 3	255	4	69	1	173		8	45	32	12	7	103	56
Ward 2, Precinct 4	392	7	221	12	143		9	50	127	35	29	107	44
Ward 2, Precinct 5	422	2	340	4	66		10	38	200	39	57	48	40
Ward 2, Precinct 6	448	4	149	4	278		13	81	68	28	16	203	52
Ward 2, Precinct 7	593	5	348	1	224		15	63	202	47	43	192	46
Ward 2, Totals....	3,287	36	1,396	39	1,731	1	84	493	772	212	184	1,245	381
Ward 3, Precinct 1	332	6	89	3	220		14	38	33	7	3	237	14
Ward 3, Precinct 2	452	1	105	8	326		12	96	76	27	8	224	21
Ward 3, Precinct 3	391	5	51	4	321		10	72	16	4	5	271	23
Ward 3, Precinct 4	313	3	72	5	226		7	86	31	9	2	165	20
Ward 3, Totals....	1,488	15	317	20	1,093		43	292	156	47	18	897	78
Ward 4, Precinct 1	227	8	122	5	81		11	31	72	20	20	50	34
Ward 4, Precinct 2	231	3	160	4	62		2	22	81	27	27	40	34
Ward 4, Precinct 3	231	2	106	4	112		7	45	63	17	18	61	27
Ward 4, Precinct 4	353	1	247	4	95		6	48	144	41	45	47	28
Ward 4, Precinct 5	259	1	183	1	66		8	24	105	29	31	39	31
Ward 4, Precinct 6	312	4	256	4	37		11	28	159	29	35	25	36
Ward 4, Precinct 7	305	5	128	2	162		8	60	75	12	14	106	38
Ward 4, Precinct 8	314	5	140	6	155		8	55	68	19	21	99	52
Ward 4, Totals....	2,232	29	1,342	30	770		61	313	767	194	211	467	280
Ward 5, Precinct 1	349	4	290	2	46		7	16	214	27	28	34	30
Ward 5, Precinct 2	416		167	6	235		8	40	122	22	22	158	52
Ward 5, Precinct 3	494		296	2	180		16	63	178	45	36	123	49
Ward 5, Precinct 4	466	3	102	13	338		10	133	57	10	5	192	69
Ward 5, Totals....	1,725	7	855	23	799		41	252	571	104	91	507	200
Grand Totals.....	10,611	100	4,948	127	5,150	2	284	1,638	2,935	670	610	3,607	1,151

CANDIDATES FOR ALDERMEN.

CANDIDATES. NAMES OF	John L. Andrews.	Joseph O. Authier.	James F. Aylward.	James T. Barrett.	Christian Beck.	Stoughton Bell.	Fred L. Beunke.	Herman Bird.	William W. Bird.	James A. Brown.	Hans L. Carstein.	Oliver D. Clary.	John W. Coveney.	James Culhane.	William P. Davis.	William R. Davis.	J. Alfred Fuglestad.	Timothy W. Good.	Albert H. Hall.	John E. Hannigan.	Stephen H. Harrington.	Carl Johansen.	Alfred Johnson.	Robert Lehman.	Jules E. Loubris.	Robert Lusk.	John D. Merrill.	William J. Ryan.	John P. Stearns.	George B. Whitmore.	Scattering.	Blank.
WARD 1.																																
Precinct 1.....	87	63	247	157	20	213	163	157	154	41	206	25	113	92	95	163	4	212	168	85	80	10	14	23	13	14	201	21	83	56	2	1,198
" 2.....	92	77	242	200	26	228	192	183	188	56	234	29	128	93	101	185	4	236	190	90	84	6	11	29	12	16	224	18	85	79		963
" 3.....	68	107	215	148	34	91	88	180	75	46	110	47	171	225	171	78	13	234	75	138	146	18	22	39	26	30	133	30	111	42		1,522
" 4.....	50	22	200	148	16	201	193	140	180	43	189	17	55	36	48	174	5	176	190	34	34	8	13	10	3	6	203	4	38	80		498
" 5.....	56	45	309	221	16	309	277	224	265	50	314	29	98	53	71	261	6	266	278	47	64	5	5	12	12	12	303	11	65	108		949
Ward 1 Totals.	353	314	1,213	874	112	1,042	913	884	862	236	1,053	147	565	499	486	861	32	1,124	901	394	408	47	65	113	66	78	1,064	84	382	365	2	5,130
WARD 2.																																
Precinct 1.....	50	206	356	369	72	60	58	275	78	96	93	77	418	226	248	206	17	238	65	222	486	23	28	61	50	65	91	54	200	34		3,343
" 2.....	54	123	257	173	59	106	141	220	124	72	124	68	191	140	162	172	15	182	107	138	228	17	31	46	39	47	111	38	118	61		1,718
" 3.....	20	96	128	85	28	38	55	123	71	37	49	26	108	84	98	71	2	85	35	84	122	8	12	18	20	20	35	14	80	20		1,133
" 4.....	75	65	252	154	40	169	210	216	189	54	184	48	119	67	104	179	14	178	165	65	114	18	31	25	20	19	161	33	68	87		1,189
" 5.....	68	29	297	204	11	283	334	279	301	94	294	41	66	29	74	273	4	220	271	30	43	15	16	3	3	4	280	7	38	124		907
" 6.....	50	98	250	175	44	98	122	212	125	72	125	57	183	128	136	153	13	186	96	115	254	12	19	38	22	23	109	41	100	55	1	1,816
" 7.....	97	74	403	267	31	275	294	318	278	102	299	74	178	89	119	303	13	287	258	92	174	19	26	31	18	34	295	30	94	139	1	1,811
Ward 2 Totals.	414	691	1,943	1,427	285	1,029	1,214	1,643	1,166	527	1,168	391	1,263	763	941	1,357	78	1,376	997	746	1,421	112	163	222	172	212	1,082	217	698	520	2	11,917

WARD 3.																															
Precinct 1.....	32	84	153	153	36	50	50	126	54	163	73	80	201	100	92	65	11	115	49	109	144	10	15	38	26	32	67	28	79	28		1,389
" 2.....	42	121	254	243	51	52	70	173	69	174	99	110	262	144	136	64	16	150	47	167	203	18	18	43	30	33	78	44	115	33	1	1,912
" 3.....	27	112	211	236	46	35	36	143	32	146	52	95	248	131	123	45	18	146	34	136	204	10	13	39	23	21	45	33	97	16		1,748
" 4.....	25	89	158	208	34	40	43	109	46	84	64	69	202	91	91	52	14	123	36	95	158	14	10	30	15	21	42	35	69	17		1,359
Ward 3 Totals.	126	406	776	840	167	177	199	551	201	567	288	354	913	466	442	226	59	534	166	507	709	52	56	150	94	107	232	140	360	94	1	6,408
WARD 4.																															
Precinct 1.....	47	55	125	79	31	94	110	122	105	46	99	35	65	53	73	90	13	106	81	58	67	16	22	29	15	16	88	15	57	58		627
" 2.....	58	44	127	78	21	104	162	134	112	45	118	18	59	36	69	114	7	107	105	42	49	7	11	13	11	11	111	14	41	78		635
" 3.....	31	46	141	88	19	77	123	141	87	39	92	30	83	61	77	67	7	120	76	56	77	10	14	27	17	15	79	17	50	54		720
" 4.....	67	34	211	106	21	184	244	185	187	68	214	35	62	41	74	185	8	191	190	34	50	13	12	17	11	17	195	21	41	161		1,004
" 5.....	48	26	142	82	13	135	192	138	136	56	141	31	51	32	68	126	11	130	132	30	44	14	15	18	14	10	138	12	41	121		702
" 6.....	74	27	171	93	25	189	244	186	187	71	207	21	53	23	64	164	14	135	183	21	31	12	18	13	6	11	194	13	39	132		811
" 7.....	38	77	188	122	26	99	135	162	107	29	125	41	113	102	133	98	6	181	88	74	104	9	9	19	12	11	100	13	74	66	2	992
" 8.....	43	60	169	107	42	105	150	171	102	53	126	30	93	110	117	104	13	196	101	75	94	20	16	27	20	17	115	26	67	80		1,005
Ward 4 Totals.	406	369	1,274	755	198	987	1,360	1,239	1,023	407	1,122	241	579	458	675	948	79	1,166	956	390	516	101	117	163	106	108	1,020	131	410	750	2	6,496
WARD 5.																															
Precinct 1.....	67	40	238	193	13	251	254	157	246	69	276	28	64	25	49	221	9	215	268	29	34	6	10	7	6	4	257	10	63	97		633
" 2.....	53	153	239	202	35	153	154	214	149	62	213	25	162	126	118	152	12	242	175	127	147	8	13	35	14	22	166	24	165	63		1,153
" 3.....	89	158	288	204	28	235	251	231	233	84	340	46	163	87	109	236	12	239	274	93	109	13	15	30	19	20	252	30	136	139		1,271
" 4.....	53	287	243	203	49	73	86	208	80	64	198	50	232	204	181	100	28	216	103	197	237	24	22	53	31	36	115	58	203	48	1	1,443
Ward 5 Totals.	262	638	1,008	802	125	712	745	810	708	279	1,027	149	621	442	457	709	61	912	820	446	527	51	60	125	70	82	790	122	567	347	1	4,500
Grand Totals..	1,561	2,418	6,214	4,698	887	3,947	4,431	5,127	3,960	2,016	4,658	1,282	3,941	2,628	3,001	4,101	309	5,112	3,840	2,483	3,581	363	461	773	508	587	4,188	694	2,417	2,076	8	34,451

CANDIDATES FOR COMMON COUNCIL.

WARD ONE.

	John J. Brassil.	Charles H. Lake.	George H. Mahady.	Richard J. Powers.	Thorndike Spalding.	Harry N. Stearns.	George Stephens.	Charles Walcott.	Blank.
Precinct 1	112	193	97	89	250	191	53	188	347
Precinct 2	135	222	77	104	254	223	77	204	268
Precinct 3	275	121	110	168	114	88	87	81	568
Precinct 4	44	203	28	35	194	188	57	180	167
Precinct 5	76	307	43	68	307	312	61	294	256
Totals	642	1,046	355	464	1,119	1,002	335	947	1,606

WARD TWO.

	Edward J. Barry.	Harleigh J. Bushway.	James W. Cairnes.	Michael H. Flynn.	John H. Gartlend.	Thomas H. Heaton.	George H. Hodgkins.	Thomas J. O'Brien.	Andrew L. Pollock.	James F. Quinn.	Herbert A. Rhoades.	Joseph E. Sharkey.	Michael J. Shea.	William J. Sullivan.	Scattering.	Blank.
Precinct 1	230	196	239	313	275	79	118	191	73	329	54	318	288	255		1,332
Precinct 2	161	185	149	229	126	107	58	114	52	130	119	205	215	166		756
Precinct 3	67	40	112	135	81	37	15	82	20	44	41	97	168	111		480
Precinct 4	214	199	69	207	67	137	69	76	66	132	177	146	113	77		603
Precinct 5	295	290	26	183	43	129	74	58	81	195	320	195	33	33	1	576
Precinct 6	178	144	109	224	129	99	43	128	52	150	108	226	132	131		835
Precinct 7	328	305	78	244	202	143	83	180	98	194	294	253	93	101	1	961
Totals	1,473	1,359	782	1,535	923	731	460	829	442	1,174	1,113	1,440	1,042	874	2	5,543

WARD THREE.

	John T. Hart.	Daniel B. Shaughnessy, Jr.	Alexander J. Sullivan.	Scattering.	Blank.
Precinct 1	238	255	238		265
Precinct 2	307	308	303		438
Precinct 3	289	322	286		276
Precinct 4	211	221	220	1	286
Totals	1,045	1,106	1,047	1	1,265

CANDIDATES FOR COMMON COUNCIL—Concluded.

WARD FOUR.

	Harry P. Ball.	Solomon H. Barnard.	Abraham J. Bennett.	William D. Berkeley.	George B. Caswell.	Edward E. Clark.	Thomas F. Coyne.	Edwin A. Cutting.	Charles R. Greco.	Dennis D. O'Leary.	Paul L. Wootton.	Blank.
Precinct 1.....	62	88	76	73	79	85	64	92	33	64	32	160
Precinct 2.....	65	140	38	51	109	105	35	102	32	45	24	178
Precinct 3.....	58	82	51	80	67	92	66	73	47	63	18	227
Precinct 4.....	127	185	39	67	169	206	44	196	92	55	22	210
Precinct 5.....	85	143	32	42	119	152	34	145	52	46	18	168
Precinct 6.....	107	191	35	28	198	183	18	184	54	21	24	205
Precinct 7.....	54	95	76	131	95	104	95	89	63	117	21	280
Precinct 8.....	59	103	91	117	96	109	74	95	65	124	48	275
Totals.....	617	1,027	438	589	932	1,036	430	976	438	535	207	1,703

WARD FIVE.

	Edgar E. Chester.	William H. Colman.	Frank B. Corner.	Howland Dudley.	John L. Dyer.	Nils T. Fuglestad.	Edward Grant.	David J. Nelligan.	John J. O'Connor.	Samuel H. Talbot.	Blank.
Precinct 1.....	14	49	33	278	246	7	26	32	148	102	112
Precinct 2.....	10	179	93	157	155	7	18	150	120	87	272
Precinct 3.....	22	126	79	239	209	4	44	114	147	215	283
Precinct 4.....	36	228	116	60	56	12	40	270	130	79	371
Totals.....	82	582	321	734	666	30	128	566	545	483	1,038

CANDIDATES FOR SCHOOL COMMITTEE FOR THREE YEARS, FOR ONE YEAR, AND VOTE ON THE QUESTION OF TERM OF OFFICE OF THE CITY CLERK, AND VOTE ON THE QUESTION OF GRANTING LIQUOR LICENSES.

	Ward 1. For Three Years.			Ward 2. For Three Years.			Ward 3. For Three Years.			Ward 4. For Three Years		Ward 5. For Three Years			Ward 1. For One Year.		Ward 2. For One Year.		Ward 5. For One Year.				Question of Term of Office of City Clerk.			Question of Granting Liquor Licenses		
NAMES OF CANDIDATES.	Charles H. Thurston.	Scattering.	Blank.	George W. Bicknell.	Scattering.	Blank.	Robert Walker.	Scattering.	Blank.	Sherman R. Lancaster.	Blank.	Arthur P. Stone.	Scattering	Blank.	Paul H. Hanus.	Blank.	J. Henry Russell.	Blank.	William J. Mandell.	Scattering.	Blank.	Whole Number.	Yes.	No.	Blank.	Yes.	No.	Blank.
Ward 1.																												
Precinct 1	263		131	201		193	176		218	170	224	181		213	193	201	175	219	166		228	394	164	70	146	116	226	38
Precinct 2	291		116	213		194	202		205	182	225	201		206	208	199	197	210	187		220	407	175	79	137	145	227	19
Precinct 3	267		138	108		297	104		301	90	315	95		310	93	312	87	318	82		323	405	171	74	158	232	143	28
Precinct 4	231		49	203		77	182		98	176	104	187		93	182	98	177	103	173		107	280	145	56	73	50	220	4
Precinct 5	337		120	313	1	143	282		175	282	175	285		172	291	166	274	183	269		188	457	197	87	147	69	344	18
Totals	1,389		554	1,038	1	904	946		997	900	1,043	949		994	967	976	910	1,033	877		1,066	1,943	852	366	661	612	1,160	107
Ward 2.																												
Precinct 1	200		515	201		514	180		535	96	619	148		567	128	587	168	547	136		579	715	221	121	373	458	193	64
Precinct 2	168		295	187		276	142		321	112	351	113		350	102	361	136	327	106		357	463	172	90	200	211	213	38
Precinct 3	86		169	90		165	74		181	46	209	56		199	49	206	66	189	55		200	255	72	42	141	150	83	22
Precinct 4	230		171	259		142	199		202	198	203	182		219	155	246	192	209	166		235	401	165	100	127	117	264	11
Precinct 5	309	1	125	347		88	290		145	297	138	273		162	250	185	290	145	264		171	435	193	99	130	66	345	11
Precinct 6	165		283	176		272	139		309	114	334	124		324	102	346	136	312	113		335	448	155	91	202	172	247	29
Precinct 7	360		238	387		211	308		290	281	317	288		310	248	350	278	320	255	1	342	598	260	131	202	140	427	26
Totals	1,518	1	1,796	1,647		1,668	1,332		1,983	1,144	2,171	1,184		2,131	1,034	2,281	1,266	2,049	1,095	1	2,219	3,315	1,238	674	1,375	1,314	1,772	201

Ward 3.																										
Precinct 1	111		221	97		235	195		137	78	254	92		240	82	250	84	248	82		250	332	120	53	159	188	119	25
Precinct 2	155		298	112		341	219		234	79	374	99		354	89	364	92	361	71		382	453	147	74	231	259	150	43
Precinct 3	120		271	96		295	202	1	188	68	323	89		302	73	318	91	300	73		318	391	152	56	183	252	104	35
Precinct 4	104		210	102		212	148		166	54	260	72		242	67	247	71	243	62		252	314	96	59	158	201	94	18
Totals	490		1,000	407		1,083	764	1	725	279	1,211	352		1,138	311	1,179	338	1,152	288		1,202	1,490	515	242	731	900	467	121
Ward 4																										
Precinct 1	120		110	109		121	99		131	106	124	80		150	76	154	75	155	80		150	230	79	54	94	80	134	13
Precinct 2	123		111	126		108	101		133	124	110	93		141	78	156	82	152	83		151	234	81	56	94	65	152	14
Precinct 3	108		124	111		121	89		143	102	130	82		150	72	160	85	147	82		150	232	86	65	80	68	156	7
Precinct 4	219		136	212		143	181		174	221	134	180		175	153	202	174	181	158		197	355	145	84	124	70	276	7
Precinct 5	149	1	111	150		111	132		129	163	98	118		143	103	158	116	145	109		152	261	111	60	88	67	181	11
Precinct 6	206		111	226		91	177		140	219	98	168		149	153	164	158	159	158		159	317	113	104	95	41	256	15
Precinct 7	176		132	150		158	130		178	119	189	117		191	99	209	125	183	101		207	308	150	64	91	123	169	13
Precinct 8	168		147	144		171	119		196	121	194	108		207	107	208	111	204	108		207	315	126	93	95	110	185	19
Totals	1,269	1	982	1,228		1,024	1,028		1,224	1,175	1,077	946		1,306	841	1,411	926	1,326	879		1,373	2,252	891	580	761	624	1,509	99
Ward 5																										
Precinct 1	249		106	253		102	236		119	234	121	259	1	95	223	132	220	135	255		100	355	169	71	109	28	305	16
Precinct 2	268		160	238		190	220		208	189	239	247		181	205	223	213	215	239		189	428	169	81	166	130	260	26
Precinct 3	303		200	290		213	268		235	242	261	292		211	221	282	241	262	280		223	503	212	118	164	117	348	29
Precinct 4	200		266	186		280	177		289	138	328	203		263	168	298	174	292	193		273	466	160	131	175	206	227	33
Totals	1,020		732	967		785	901		851	803	949	1,001	1	750	817	935	848	904	967		785	1,752	710	401	614	481	1,140	104
Gr'nd T'ls	5,686	2	5,064	5,287	1	5,464	4,971	1	5,780	4,301	6,451	4,432	1	6,319	3,970	6,782	4,288	6,464	4,106	1	6,645	10,752	4,206	2,263	4,142	3,931	6,048	632

CONTENTS

	PAGE
Mayor's Address	5
Report of City Auditor	19
Receipts during the year	20
Sale of Bonds	20
City Funded Debt	21
Funded Water Debt	24
Temporary Loans	25
Trust Funds	25
Cemetery Fund	25
Sinking Fund "Harvard Bridge"	26
Sinking Fund "Park"	26
Sinking Fund "Clay Lands"	26
Sinking Fund "Cambridge Bridge"	26
Sinking Fund "Improved Sewerage"	26
Sinking Fund "General"	26
Commissioners of Sinking Funds	27
Trustees of Sinking Fund of Water Works	27
Abatements, Taxes	27
Taxes	28
Polls and Valuation for three years	28
Valuations, Polls, Dwellings, and Rate of Taxation (for twelve years)	29
Borrowing Capacity	30
Assets and Liabilities	32
Revenue: Estimated and Actual	32
Transfers	33
Comparative Statement	34
Expenditures	35–36
Detailed Statement of Receipts, Expenditures and Appropriations	37
Abatements, Taxes	37
Assessors' Department	37
Auditing Department	38
Board of Survey	39
Bridge Department	39
Cambridge Bridge	41
Cemetery Department	44
City Clerk Department	46
City Messenger Department	49
Civil Service Department	49
Clerk of Committees Department	49
Contingent Fund	50
Election Expenses: City Clerk	56
Registrars of Voters	58
Superintendent of Public Buildings	59

PAGE

RECEIPTS, EXPENDITURES, ETC. — *Continued.*

Electrical Department: Lamps 59
Wires 60
Engineering Department 62
Assessors' Plans 64
Executive Department 64
Fire Department 64
Health Department 68
Temporary Hospital 71
Inspection of Milk and Vinegar 72
Inspection of Provisions 73
Interest 74
Land Damages 74
Law Department 75
Overseers of the Poor Department 76
City Home Department 76
Farm Department 81
House Offal 82
Outside Aid Department 83
Park Department 87
Construction 87
Maintenance 94
Maintenance: Interest 99
Sinking Fund 100
Plumbers' Examiners' Department 100
Police Department 100
Public Library Addition 103
Public Library Department 104
Public Library, East Cambridge Branch 106
Public Property: The Armory, Beech Street 107
City Buildings, Care and Repair 107
Incidentals 111
Land for Schoolhouse, Ward Two 112
New Schoolhouse, Ward One 112
New Schoolhouse, Ward Two 112
Rifle Range 113
Sanitary Arrangements, Schoolhouses 113
Schoolhouses, Care and Repair 114
Wellington School 118
Gore School 118
Felton School 119
School Department, Care of Truants 119
Flags 119
Incidentals 120
Salaries 121
Text-Books and Supplies 122
Vacation Schools 124
Sealer of Weights and Measures 125
Sewer Department 126
Construction 126

PAGE

RECEIPTS, EXPENDITURES, ETC.— *Continued.*
Improved Sewerage 127
Maintenance 129
Sinking Funds 132
State Aid 133
Stationery and Printing 134
Street Department: Bridges 135
Cleaning 136
Collecting of Ashes 137
Construction, Belmont Street 138
Construction, Clark Street 138
Construction, Granite Street 139
Construction, Inman Court 139
Maintenance 139
Paving 145
Rebuilding Bridge Street 146
Rebuilding Broadway 146
Rebuilding Brookline Street 147
Rebuilding crossings, etc. 148
Rebuilding Harvard Square 148
Rebuilding Massachusetts Avenue 149
Rebuilding Mt. Auburn Street 150
Watering 151
Treasury Department 152
Water Works: Construction 153
Maintenance (General Account) 155
Maintenance (Abatements) 163
Ice for Drinking Fountains 164
Interest on Water Loan 164
Maintenance (Refunds) 164
Sinking Funds 164
Receipts and Expenditures 165
RECAPITULATION 166
REAL ESTATE OWNED BY THE CITY 169
PROPERTY EXEMPT FROM TAXATION 175
Schedule of City Property 183
REPORT OF COMMITTEE ON ACCOUNTS 197
COMMITTEE ON FINANCE 198
THE CITY TREASURER 203
COMMISSIONERS OF SINKING FUNDS OF THE CITY 211
TRUSTEES OF SINKING FUND OF CAMBRIDGE WATER WORKS . . 216
WATER BOARD 219
Registrar 223
Statement of Water Registrar to Committee on Accounts . . 228
Statement of City Treasurer 230
Superintendent of Water Works 231
Pumping Engineer 250
SUPERINTENDENT OF STREETS 252
CITY ELECTRICIAN 279
BOARD OF PARK COMMISSIONERS 299

PAGE

REPORT OF BOARD OF PARK COMMISSIONERS, ETC —*Continued.*
General Superintendent of Parks 310
Landscape Architects 325
City Engineer 329
CITY ENGINEER 332
SUPERINTENDENT OF PUBLIC BUILDINGS 348
TRUSTEES OF THE CAMBRIDGE PUBLIC LIBRARY 366
Librarian 368
CHIEF ENGINEER OF THE FIRE DEPARTMENT 380
CHIEF OF POLICE 410
BOARD OF HEALTH 416
TRUSTEES OF BRIDGE CHARITABLE FUND 433
TRUSTEES OF SANDERS TEMPERANCE FUND 435
CITY CLERK (FEES) 439
CITY MESSENGER 440
OVERSEERS OF THE POOR 441
Superintendent of the City Home 446
City Physician 452
BRIDGE COMMISSIONER 453
TRUSTEES OF THE DOWSE INSTITUTE 460
INSPECTOR OF ANIMALS 461
COMMITTEE ON SOLDIERS' AID 462
INSPECTOR OF MILK 463
SEALER OF WEIGHTS AND MEASURES 471
BOARD OF SURVEY 479
SCHOOL COMMITTEE 487
CEMETERY COMMISSIONERS 562
ORDINANCES PASSED BETWEEN FEBRUARY 27, 1901, AND MARCH 28, 1902 569
Streets (Chap. 25, Sect. 8) 569
Duties and Salaries (Chap. 28, Sect. 30) 569
Fire (Chap. 11, Sects. 9 and 12) 570
Official Bonds 570
Water Works (Chap. 27, Sect. 24) 570
Sale of Goods, Wares and Merchandise in the Public Streets . . 571–575
Construction, etc., of Buildings (Chap. 13, Sect. 31) 572
General Regulations, etc., for Streets, etc. (Chap. 45, Sect. 35) . 572
Wards (Chap. 33) 572
Fire (Chap. 11, Sect. 1) 576
Fire (Chap. 11, Sect. 9) 576
Construction, etc , of Buildings (Chap. 13, Sect. 130) . . . 577
Executive (Chap. 2, Sect. 10) 580
Duties and Salaries (Chap. 28, Sect. 30) 580
Sealer of Weights and Measures 580
AMENDMENTS TO REGULATIONS OF THE BOARD OF ALDERMEN PASSED BETWEEN APRIL 3, 1900, AND MARCH 28, 1902 581
Billiard and Pool 580–582
Pawnbrokers, etc. 580
Salaries of Certain City Officers 582
Minors' Licenses 582
Reserve Police Force 583

PAGE

MAYORS, 1846–1902 585
PRESIDENTS OF THE BOARD OF ALDERMEN 585
PRESIDENTS OF THE COMMON COUNCIL 586
DIAGRAM AND KEY TO BOARD OF ALDERMEN CHAMBER 588
DIAGRAM AND KEY TO COMMON COUNCIL CHAMBER 589
MUNICIPAL REGISTER 591
STATE AND CITY ELECTIONS, 1901, VOTES CAST AT 613

7929 .11
16